DOCUMENT RESUME

ED 121 215 HE 007 675

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TITLE Survey of How Medical Students Finance Their Education, 1974-75.
INSTITUTION Association of American Medical Colleges, Washington, D. C.
SPONS AGENCY Health Resources Administration (DHEW/PHS), Bethesda, Md. Bureau of Health Manpower.
PUB DATE Dec 75
NOTE 143p.; For related documents, see HE 007 673-674

EDRS PRICE MF-$0.83 HC-$7.35 Plus Postage
DESCRIPTORS *Educational Finance; Family Characteristics; Family Income; *Financial Support; Geographic Distribution; *Higher Education; Income; Marital Status; *Medical Education; *Medical Students; Statistical Data; Student Characteristics; Student Costs; Student Loan Programs; Tables (Data)

ABSTRACT

During the 1974-75 school year, a survey of medical students was conducted by the Association of American Medical Colleges to investigate how medical students are currently financing their medical education. This document describes the findings regarding medical students' finances for the 1974-75 academic year and compares the results with those of similar surveys conducted in 1968 and 1971. The sample for the 1974-75 survey consisted of students from 110 of the 114 U.S. medical schools. Data shown in the tables are based on a representative national sample. Tables cover: (1) background characteristics; (2) average annual expenses; and (3) sources of income. A comparison of selected data for this sample, the nonmonitored questionnaires in the national sample, the complete national sample, and the total data base are given in the appendix. (Author/KE)

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SURVEY OF
HOW MEDICAL STUDENTS FINANCE THEIR EDUCATION
1974-75

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HE 007675

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DECEMBER 1975

SURVEY OF

HOW MEDICAL STUDENTS FINANCE THEIR EDUCATION

1974-75

The work upon which this publication is based was supported in part by the Bureau of Health Manpower, Department of Health, Education and Welfare pursuant to contract number 231-75-0007. However, any conclusions and/or recommendations expressed herein do not necessarily represent the views of the supporting agency.

AAMC DIVISION OF STUDENT STUDIES

Final Report of Study of
How Medical Students Finance Their Education, 1974-75

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I. INTRODUCTION

During the 1974-75 school year, a survey of medical students was conducted by the Association of American Medical Colleges to investigate how medical students are currently financing their medical education. This report describes the detailed findings regarding medical students' finances for the 1974-75 academic year and compares these results with those of similar surveys conducted in 1968 and 1971 by the Bureau of Health Resources Development of the National Institutes of Health.(1)

Survey Design

The sample for the 1974-75 survey consisted of students from 110 of the 116 U.S. medical schools. Sets of questionnaires were mailed to all of the schools in April, 1975, with instructions for selecting a representative sample of the students at each school. Six of the schools either chose not to participate or were unable to participate because of schedule conflicts or other problems.

(1) U.S. Department of Health, Education and Welfare, Public Health Service, How Medical Students Finance Their Education, January 1970. PHS Publication No. 1336-1. U.S. Government Printing Office, Washington, D.C. 20402.

U.S. Department of Health, Education and Welfare, Public Health Service, How Medical Students Finance Their Education, June, 1974, DHEW Publication No. 75-13.

A total of 23,233 questionnaires were distributed by the schools of which 11,552 (49.7 percent) were completed, returned to AAMC and entered onto the data file.

Response rates for the 110 schools which participated in the survey ranged from 5 to 86 percent, with 95 of the schools having response rates between 30 and 69 percent (Table 1).

As in previous studies, the estimated rate of return was highest for first year students (Table 2). Overall rate of return was somewhat lower than in previous studies (50 percent in 1975 as compared with 85 percent in 1971 and 66 percent in 1968). However, in the 1975 survey, the lowest rate of return occurred in the intermediate classes, and proportionate representation of final year students in the sample was similar to that of final year students in the total population.

Data shown in the tables for this report are based on a representative national sample selected from the total sample of returned questionnaires. The national sample represents 15 percent of the enrollment of each school and consists of 7,261 questionnaires.

The procedures specified by AAMC for selecting the sample of students provided for a control sample, to be selected from the primary sample, of students who would receive more thorough screening of the questionnaire responses. Questionnaires for this subsample were to be carefully screened by school officials to check the accuracy of student responses. A total of 417 monitored questionnaires were completed and returned for processing. A comparison of selected data for this sample, the non-monitored questionnaires in the national sample, the complete national sample, and the total data base are shown in the appendix.

Table 1

Distribution of Medical Schools By

Percent of Returns

Percent of Returns	Number of Schools
Total	116
80-89	3
70-79	4
60-69	20
50-59	34
40-49	18
30-39	23
20-29	6
10-19	0
1-9	2
0	6

Table 2

Completeness of Returns By Class

Medical School Class	Percentage Distribution of Returns	Percentage Distribution of Classes[1]	Estimated Percentage Return Rate[2]
Total	100%	100%	50%
First Year	31	27	56
Intermediate	45	49	46
Final Year	24	24	49

[1]From AAMC fall enrollment data (1974-75).

[2]Estimated from percentage distributions of returns and enrolled students.

II. BACKGROUND CHARACTERISTICS

Characteristics of Medical Students

In 1975, 38 percent of all medical students were married. This figure represents a substantial decrease from the 47 percent who were married in 1971 and a slight decrease from the 41 percent in 1968. Although the percentage of freshman who were married decreased somewhat from 1971, the most dramatic change appeared to be in the upper classes. In particular, the proportion of seniors who reported themselves as married decreased from 60 percent in 1968 and from 65 percent in 1971 to 52 percent in 1975.

Table 3

Distribution of Medical Students By

Marital Status and Medical School Class

Marital Status	All Classes	First Year	Inter-mediate	Final Year
All Students	100%	100%	100%	100%
Single	62	76	60	48
Married, no children	29	19	31	38
Married, one child	6	3	6	9
Married, two or more children	3	2	3	5

As in previous studies, the proportion of married students in each class in public medical schools consistently exceeded the comparable proportion of students in private medical schools. The proportion of students who were married increased from 1968 to 1971 for almost all classes in both public and private schools, with the greatest increases (10 to 12 percentage points) occurring among first year students. On the other hand, the 1975 data showed a consistent decrease from 1971 in the proportion of students in each school category who were married, and for final year students the percent who were married also showed a substantial decrease from 1968.

Table 4

Distribution of Medical Students By

Marital Status and Control of Medical School

Marital Status	All Schools	Public Schools	Private Schools
All Students	100%	100%	100%
Single	62	59	67
Married, no children	29	31	27
Married, one child	6	6	4
Married, two or more children	3	4	2

Table 5

Comparison of Distribution of Medical Students

Who Were Married by Medical School Class

and Control of Medical School 1968, 1971, 1975

Medical School Class	1968[1]			1971[2]			1975		
	All Schools	Public Schools	Private Schools	All Schools	Public Schools	Private Schools	All Schools	Public Schools	Private Schools
Total	41%	45%	36%	47%	51%	41%	38%	41%	33%
First Year	22	26	18	35	38	28	24	28	20
Intermediate	{36 50}	{40 54}	{31 44}	{41 51}	{45 57}	{34 43}	40	43	35
Final Year	60	65	55	65	67	63	52	54	49

[1]Source: U.S. Department of Health, Education and Welfare, Public Health Service. How Medical Students Finance Their Education, June 1965, PHS Publication No. 1336-1. U.S. Government Printing Office, Washington, D.C. 20402.

[2]Source: U.S. Department of Health, Education and Welfare, Public Health Service. How Medical Students Finance Their Education, June 1974, DHEW Publication No. 75-13. U.S. Government Printing Office, Washington, D.C. 20402.

Analysis of marital status by geographic location of medical school reveals that less than half of the students were married in each geographic division. The proportion of students who reported themselves in 1975 to be married ranged from 29 percent in New England and the Middle Atlantic Division to 47 percent in the West South Central Division. Differences between public and private schools with respect to the proportion of married students were greatest in the West South Central and East North Central Divisions.

Table 6

Proportion of Students Who Were Married

by Geographic Division and Control of Medical School

Geographic Division[1]	All Schools	Public Schools	Private Schools
Total	38%	41%	33%
New England	31	33	30
Middle Atlantic	29	29	28
South Atlantic	39	41	36
East South Central	46	47	45
West South Central	47	50	39
East North Central	39	42	32
West North Central	42	43	41
Mountain	46	46	-[2]
Pacific	36	36	36

[1] The States with medical schools included in each Division are: New England-Connecticut, Massachusetts, New Hampshire, Rhode Island, Vermont; Middle Atlantic-New Jersey, New York, Pennsylvania; South Atlantic-Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia (also District of Columbia and Puerto Rico); East South Central-Alabama, Kentucky, Mississippi, Tennessee; West South Central-Arkansas, Louisiana, Oklahoma, Texas; East North Central-Illinois, Indiana, Michigan, Ohio, Wisconsin; West North Central-Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakato, South Dakota; Mountain-Arizona, Colorado, New Mexico, Utah; Pacific-California, Hawaii, Oregon, Washington.

[2] There are no private medical schools in the Mountain Division.

Family Income

In this study, medical students were asked to provide their best estimate of their parents' gross income for 1974. This figure is comparable to the data collected in the 1967-68 survey. However, direct comparisons with the 1970-71 data cannot be made since that survey requested net rather than gross income. About 3 percent of the students did not complete the item, stating most frequently that they could not provide accurate answers or that the income level of their parents was not relevant to their own financial situations.

As in previous studies, income of families of medical students in private schools was generally higher than that of students in public schools. Estimated median income was $19,315 for families of students in public schools and $21,972 for families of students in private schools. The comparable figure for all families in the United States is $12,836.

Table 7

Distribution of Medical Students by Family Income and Control of Medical School

Family Income	All Schools	Public Schools	Private Schools	All U.S. Families 1974[2]
Total[1]	100%	100%	100%	100%
Less than $5000	6	6	5	13
$5000 - $9999	11	11	10	23
$10,000 - $14,999	18	19	16	24
$15,000 - $19,999	15	16	14	18
$20,000 - $24,999	13	14	13	10
$25,000 - $49,999	24	23	26	12
$50,000 or more	13	11	16	
Estimated Median	$20,249	$19,315	$21,972	$12,836

[1] Based on students who supplied data on family income.

[2] Source: U.S. Department of Commerce, Bureau of the Census, Money Income and Poverty Status of Families and Persons in the United States:1974, Series P-60, No. 99, July 1975.

Differences between classes with respect to family income were generally small, but families of students in the earlier years tended to have slightly higher incomes than families of students in the upper years. Between 5 and 6 percent of the students in each class came from families with gross incomes less than $5000. Family incomes of less than $15,000 were reported by 31 percent of the first year students and by 36 percent of the students in their final year, whereas family incomes greater than $25,000 were reported by 40 percent of the first year students and by 37 percent of final year students. These data are consistent with trends observed in the 1968 survey. However, results of the 1971 survey indicated that at that time students in the earlier years tended to be from families with lower incomes than students in the later years.

Table 8

Distribution of Medical Students by Family Income and Medical School Class

Family Income	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
Total[1]	100%	100%	100%	100%
Less than $5000	6	5	6	6
$5000 - $9999	11	10	11	10
$10,000 - $14,999	18	16	18	20
$15,000 - $19,999	15	15	15	15
$20,000 - $24,999	13	14	13	12
$25,000 - $49,999	24	26	24	23
$50,000 or more	13	14	13	14

[1] Based on students who supplied data on family income.

Family Occupations

Distribution of medical students by father's occupation was similar to the results of the 1970-71 survey. Fourteen percent of the students' fathers were physicians and an additional 5 percent worked in other medical and health occupations. Twenty-nine percent of the fathers of medical students in both public and private schools worked in other professional and technical occupations, representing a small but consistent increase of about one percent from 1971. Greatest changes from 1971 occurred in the categories of "owner, manager, administrator", which showed an increase of approximately 3 percent and clerical worker which showed a decrease of 2 percent.

Table 9

Distribution of Medical Students in Public and Private Schools by Father's Occupation in Comparison with Occupational Distribution of Employed Males 40 Years Old and Over in the United States

Occupation	Medical Students' Fathers			Employed Males 40 Years Old and Over, 1970[1]
	All Schools	Public Schools	Private Schools	
Total	100%	100%	100%	100%
Physician	14	12	17	1
Medical and other health worker	5	5	6	1
Other professional and technical	29	29	28	11
Owner, manager, administrator	23	23	23	14
Clerical	3	3	3	7
Sales	7	7	6	7
Craftsman, skilled worker	9	10	8	22
Unskilled worker	7	7	7	31
Farmer, farm worker	4	4	2	6

[1] Source: U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, Occupational Characteristics, 1970 Census of Population, PC(2)-7A.

Eighteen percent of the employed mothers of medical students worked as physicians (2 percent) or other medical and health workers (16 percent) as compared to 4 percent of all employed females 40 and over. Although the majority (56 percent) of employed mothers of medical students continued to have either non-health-related professional or technical occupations or clerical occupations, this proportion represents a slight decrease (6 percentage points) from 1971. Corresponding increases were noted in the proportion of mothers with occupations in the categories of "owner, manager, administrator," "craftsman, skilled worker" and "unskilled worker".

Table 10

Distribution of Medical Students in Public and Private Schools by Mother's Occupation in Comparison with Occupational Distribution of Employed Females 40 Years Old and Over in the United States

Occupation	Medical Students' Mothers Who Were Employed			Employed Females 40 Years Old and Over, 1970[1]
	All Schools	Public Schools	Private Schools	
Total	100%	100%	100%	100%
Physician	2	1	2	*
Medical and other health worker	16	16	16	4
Other professional and technical	29	28	31	11
Owner, manager, administrator	7	7	7	5
Clerical	27	27	26	30
Sales	6	6	6	8
Craftsman, skilled worker	3	3	3	2
Unskilled worker	10	11	9	39
Farmer, farm worker	*	1	*	1

* = Less than 0.5 percent.

[1] Source: U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, Occupational Characteristics, 1970 Census of Population, PC(2)-7A.

Family Educational Level

Thirty-eight percent of all medical students in 1975 came from families in which the father had received graduate or professional training beyond college. The comparable figure for students in 1971 was 35 percent. Fifty-five percent of the fathers had completed college, representing an increase of 6 percentage points from 1971. Corresponding figures for all U.S. males over 40 (in 1970) are 5 percent with graduate or professional training and a total of 11 percent having completed college.

Fathers of students in private medical schools tended to have more advanced training than did fathers of students in public schools. In private medical schools 42 percent of the students' fathers had graduate or professional training, as compared to 36 percent for students in public medical schools.

Table 11

Distribution of Medical Students in Public and Private Schools by Educational Level of Father in Comparison with Educational Level of Males 40 Years Old and Over in the United States

Educational Level	Medical Students' Fathers			U.S. Males 40 Years Old and Over, 1970[1]
	All Schools	Public Schools	Private Schools	
All Levels	100%	100%	100%	100%
Eighth Grade or less	7	8	6	38
Some High School	5	5	6	19
Completed High School	15	16	13	23
Specialized Technical Training	5	5	5	-[2]
Some College	13	13	12	9
Completed College	17	17	16	6
Graduate or Professional	38	36	42	5

[1] Source: U.S. Department of Commerce, Bureau of the Census, Detailed Characteristics, United States Summary, 1970 Census of Population, PC(1)-D1.

[2] Category not reported separately.

Eighteen percent of all medical students in 1975 came from families in which the mother had received graduate or professional training beyond college, and a total of 57 percent had at least some college. The corresponding figures for 1971 were 14 percent and 50 percent respectively, indicating a fairly substantial increase in the level of education of mothers of medical students.

Differences between public and private schools with respect to mothers' education appeared to be somewhat larger in 1975 than in 1971. In 1975, a total of 41 percent of the students in private schools came from families in which the mother had completed college as opposed to only 36 percent of the students in public schools. Corresponding figures for 1971 were 34 percent and 32 percent respectively.

Table 12

Distribution of Medical Students in Public and Private Schools by Educational Level of Mother in Comparison with Educational Level of Females 40 Years Old and Over in the United States

Educational Level	Medical Students' Mothers			U.S. Females 40 Years Old and Over, 1970[1]
	All Schools	Public Schools	Private Schools	
All Levels	100%	100%	100%	100%
Eighth Grade or less	4	5	4	35
Some High School	5	5	5	20
Completed High School	26	26	25	29
Specialized Technical Training	8	9	7	-[2]
Some College	19	19	18	10
Completed College	20	19	20	4
Graduate or Professional	18	17	21	2

[1] Source: U.S. Department of Commerce, Bureau of the Census, Detailed Characteristics, United States Summary, 1970 Census of Population, PC(1)-D1.

[2] Category not reported separately.

Size of Hometown

Because the categories used for the selection of size of hometown were somewhat different for the 1975 survey than for the 1971 survey, a direct comparison of these results could not be made. However, the breakdown used in the 1975 survey indicated greater differences between public and private school students. Over half (53 percent) of the 1974-75 students in private schools indicated that their hometown was either a large city or a suburb of a large city, whereas the corresponding figure for public school students was only 36 percent.

Table 13

Distribution of Medical Students by Size of Hometown and Control of Medical School

Size of Hometown	All Schools	Public Schools	Private Schools	Total U.S. Population[1]
Total	100%	100%	100%	100%
Large city (500,000 or more)	22	18	26	25
Suburb of a large city	22	19	27	-
City of moderate size (50,000 - 500,000)	20	22	17	19
Small city (10,000 - 50,000)	17	19	15	31
Small town (less than 10,000)	13	15	10	17
Farm, rural or unincorporated area	6	7	4	8

[1] Source: U.S. Department of Commerce, Bureau of the Census, Number of Inhabitants, United States Summary, 1970 Census of Population, PC(1)-A1.

III. AVERAGE ANNUAL EXPENSES

Marital Status

As in previous studies, marital status was found to be a highly important factor affecting the expenses which a medical student must assume. Average expenses in 1975 were $5792 per year for unmarried students and $9168 per year for married students. Comparable figures for 1971 were $4295 for single students and $6919 for married students. Taking into account an inflation factor of 127.0/100.0 for the difference between 1971 and 1975 dollars, the changes from 1971 to 1975 amount to a 4 percent increase in expenses of married students and a 6 percent increase in expenses of unmarried students.

Table 14

Distribution of Medical Students by Total Annual Expenses and Marital Status

Total Annual Expenses	All Students	Marital Status			
		Single[1]	Married, No Children	Married, One Child	Married, Two or More Children
All Students	100%	100%	100%	100%	100%
Less than $3000	4	7	*	1	1
$3000 - $3999	8	13	2	1	1
$4000 - $4999	13	18	4	3	0
$5000 - $5999	15	19	9	6	5
$6000 - $6999	16	18	11	11	7
$7000 - $7999	13	12	15	13	13
$8000 - $9999	16	10	28	31	22
$10,000 or more	15	3	31	34	51

[1] Includes data for students who were widowed, divorced or separated.

* = Less than 0.5 percent

The survey of students which was conducted in 1975 requested a sample of students from each of the 117 U.S. medical schools and includes representation from schools with predominantly black and predominantly female enrollment. Summary of average annual expenses for student groupings by sex and by self-description are shown in Tables 15 and 16 respectively.

Although overall average expenses of female students were less than the corresponding figures for male students, a breakdown of average expenses by marital status (Table 15) suggests that the overall results may be due to differences in the proportion of men and women students who are married. Approximately 41 percent of the male medical students reported themselves to be married as compared with only 26 percent of the female students. Within each marital status category, average expenses were larger for women students than for men students, the differences being smallest (effectively negligible) for single students and largest ($4,420) for married students with two or more children.

Table 15

Average Annual Expenses of Medical Students by Marital Status and Sex

Marital Status	Both Sexes	Male	Female
Total	$ 7,085	$ 7,089	$ 7,083
Single[1]	5,792	5,777	5,859
Married, no children	8,962	8,820	9,992
Married, one child	9,297	9,087	12,164
Married, two or more children	10,798	10,286	14,706

[1] Includes students who were widowed, divorced, or separated.

With respect to self-description, overall average annual expenses of medical students were highest for black students and lowest for students who reported self-description other than "black" or "white". Within marital categories, black students again reported the highest average expenses except for married students with one child, where students of "other" backgrounds reported the highest average expenses. Annual expenses averaged $7,357 for black students, $7,101 for white students and $6,728 for students of other backgrounds. Taking into account the inflation factor discussed earlier, these figures represent a decrease from 1971 of 12 percent for black students, an increase of one percent for white students and an increase of 30 percent for students of other backgrounds. A comparison with data from the 1968 survey using an inflation factor of 147.7/100 reveals increases of 9 percent in annual expenses of white students, 20 percent for black students and 13 percent for students of other backgrounds.

Table 16

Average Annual Expenses of Medical Students by Marital Status and Self-Description

Marital Status	All Students	Black/ Afro-American	White/ Caucasian	Other
Total	$ 7,086	$ 7,357	$ 7,101	$ 6,728
Single[1]	5,792	6,275	5,791	5,500
Married, no children	8,961	9,581	8,926	9,445
Married, one child	9,292	9,703	9,186	10,019
Married, two or more children	10,798	11,142	10,809	10,077

[1]Includes students who were widowed, divorced, or separated.

Marital Status and Location and Control of Medical School

As in previous studies, the 1975 survey revealed substantial differences between expenses of medical students relative to school location and control and class level.

The difference between expenses of students in public and private schools increased from $1,178 in 1971 to $1,945 in 1975, a total increase of 65 percent. As in previous studies, this difference appears to be primarily the result of higher school expenses for students in private schools.

Percentage increase in total annual expenses (corrected for inflation) from 1971 to 1975 ranged from two percent for married students with no children to 11 percent for married students with one child.

Overall totals by class for 1975 showed increases in average annual expenses of approximately $1,000 from the first to the final year for both public and private schools. With respect to both marital status and class, average expenses of single students showed a fairly consistent increase with class level. This trend was not apparent, however, in the average expenses of married students, and for married students with two or more children, average expenses showed a consistent decrease with class level.

Table 17

Average Annual Expenses of Medical Students by Control of Medical School, Marital Status and Medical School Class

Control of Medical School and Marital Status	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
All Schools-Total	$ 7,085	$ 6,582	$ 7,158	$ 7,612
Single	5,792	5,698	5,814	5,914
Married, no children	8,962	9,054	8,873	9,036
Married, one child	9,297	9,296	9,509	9,074
Married, two or more children	10,798	12,012	10,720	10,487
Public Schools-Total	6,298	5,675	6,472	6,742
Single	4,856	4,650	4,974	4,957
Married, no children	8,032	7,943	8,060	8,036
Married, one child	8,605	8,440	8,916	8,330
Married, two or more children	10,280	11,339	10,547	9,629
Private Schools-Total	8,243	7,739	8,298	8,836
Single	7,010	6,904	7,038	7,134
Married, no children	10,544	10,837	10,463	10,475
Married, one child	10,770	11,399	10,860	10,405
Married, two or more children	12,081	14,535	11,376	12,296

Table 18

Comparison of Average Annual Expenses of Senior Medical Students in 1964, 1968, 1971 and 1975 by Marital Status

Marital Status	1964[1]	1968[2]	1971[3]	1975
Total	$4,117	$4,954	$6,254	$ 7,612
Single	2,824	3,533	4,630	5,914[4]
Married, no children	4,965	5,859	7,288	9,036
Married, one child	4,949	5,796	6,704	9,074
Married, two or more children	5,207	6,089	6,608	10,487

[1] Source: U.S. Department of Health, Education and Welfare, Public Health Service. How Medical Students Finance Their Education, June 1965, PHS Publication No. 1336. U.S. Government Printing Office, Washington, D.C. 20402.

[2] Source: U.S. Department of Health, Education and Welfare, Public Health Service. How Medical Students Finance Their Education, January 1970, PHS Publication No. 1336-1. U.S. Government Printing Office, Washington, D.C. 20402.

[3] Source: U.S. Department of Health, Education and Welfare, Public Health Service. How Medical Students Finance Their Education, June 1974, DHEW Publication No. 75-13. U.S Government Printing Office, Washington, D.C. 20402.

[4] Includes data for students who were widowed, divorced or separated.

Average expenses were higher for private schools than for public schools in every geographic division, with differences ranging from $586 in the East South Central Division to $3,517 in New England. In the public schools, average expenses ranged from $5,637 in New England to $6,657 in the Mountain Division. In private schools, annual expenses ranged from $6,978 in the East South Central Division to $9,154 in New England.

Table 19

Average Annual Expenses of Medical Students

By Geographic Division and Marital Status

Geographic Division	All Students	Marital Status			
		Single	Married, no children	Married, one child	Married, two or more children
All Divisions	$7,114	$5,819	$ 8,985	$ 9,370	$10,798
New England	8,368	7,146	10,755	11,963	14,785
Middle Atlantic	7,598	6,455	10,353	10,130	11,661
South Atlantic	7,040	5,739	8,705	9,891	11,410
East South Central	6,576	5,149	7,847	8,809	10,353
West South Central	6,645	4,950	8,211	8,420	11,049
East North Central	7,283	5,957	9,117	9,529	11,238
West North Central	6,487	5,088	8,193	8,786	9,520
Mountain	6,820	5,194	7,947	7,645	10,341
Pacific	6,728	5,359	9,015	9,163	9,811

Table 20

Average Annual Expenses of Medical Students

By Geographic Division and Control of Medical School

Geographic Division	All Schools	Public Schools	Private Schools
All Divisions	$7,053	$6,262	$8,226
New England	8,368	5,637	9,154
Middle Atlantic	7,548	6,174	8,392
South Atlantic	6,999	6,033	8,229
East South Central	6,576	6,392	6,978
West South Central	6,565	6,317	7,367
East North Central	7,273	6,626	8,534
West North Central	6,463	6,009	7,425
Mountain	6,657	6,657	-
Pacific	6,700	5,955	8,420

Expenses for Various Items

Average school expenses for all medical students were $2,416 in 1975, an increase of 8 percent from 1971.[1] Changes from 1971 for other items include a 3 percent increase in lodging expenses, 8 percent decrease in expenses for board and 5 percent increase in other expenses.

The expense item which showed the largest and most consistent difference between public and private schools was "school expenses" which were substantially higher for students in private schools than for students in public schools. Differences in average school expenses for students in public and private schools ranged from $1,996 for single students to $1,718 for students who were married with two or more children.

With respect to the size of the family, average expenses for lodging, board and all other items showed consistent increases with increasing family size. School expenses, on the other hand, decreased consistently in both public and private schools as family size increased.

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(1) Percentage increases include the inflation factors discussed earlier.

Table 21

Average Annual Expenses of Medical Students for Various Items,

By Control of Medical School and Marital Status

Control of Medical School and Expense Item	All Students	Marital Status			
		Single	Married, no children	Married, one child	Married, two or more children
All Schools: Total Expenses	$7,085	$5,792	$ 8,962	$ 9,297	$10,798
School expenses	2,416	2,521	2,291	2,111	2,011
Lodging and maintenance of living quarters	1,657	1,264	2,176	2,370	2,803
Board	1,115	869	1,399	1,660	2,106
All other	2,064	1,303	3,181	3,304	4,067
Public Schools: Total Expenses	6,298	4,856	8,032	8,605	10,280
School expenses	1,621	1,653	1,588	1,542	1,499
Lodging and maintenance of living quarters	1,661	1,264	2,088	2,322	2,770
Board	1,099	821	1,365	1,633	2,102
All other	2,094	1,298	3,074	3,269	4,094
Private Schools: Total Expenses	8,243	7,010	10,544	10,770	12,081
School Expenses	3,576	3,649	3,471	3,285	3,217
Lodging and Maintenance of living quarters	1,651	1,265	2,325	2,471	2,885
Board	1,138	930	1,457	1,719	2,115
All other	2,020	1,310	3,362	3,377	3,999

With respect to medical school class, average total expenses for single students in higher classes were greater than those of single students in lower classes. These increases appeared to be the result of increased expenditures for board and lodging and for "other" items, since school expenses showed a consistent decrease for single students as class level increased. As family size increased, however, these trends appear gradually to be reversed. Thus for students who are married with two or more children, average total expenses, average expenses for board and lodging, and expenses for all other items decreased and average school expenses increased with increasing class level.

Table 22

Average Annual Expenses of Medical Students for Various Items

By Marital Status and Medical School Class

Marital Status and Expense Item	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
Single: Total Expenses	$ 5,792	$ 5,698	$ 5,814	$ 5,914
School expenses	2,521	2,707	2,420	2,362
Board and lodging	2,082	2,011	2,101	2,170
All other	1,303	1,092	1,395	1,510
Married, no children: Total Expenses	8,962	9,054	8,873	9,036
School expenses	2,291	2,514	2,203	2,285
Board and lodging	3,552	3,607	3,530	3,546
All other	3,181	2,991	3,192	3,283
Married, one child: Total Expenses	9,297	9,296	9,509	9,074
School expenses	2,111	2,170	2,070	2,149
Board and Lodging	4,003	3,989	4,063	3,947
All other	3,304	3,209	3,487	3,138
Married, two or more children: Total Expenses	10,798	12,012	10,720	10,487
School expenses	2,011	1,910	1,999	2,057
Board and Lodging	4,909	5,225	4,838	4,877
All other	4,067	4,877	4,127	3,656

IV. SOURCES OF INCOME

Results of the 1974-75 survey indicate some significant changes with respect to the sources of income utilized by medical students. Over the period from 1964 to 1971, a consistent increase was noted in the proportion of students receiving loans and non-refundable grants and a corresponding decrease was observed in the proportion of students who received financial help from their families. Percent of students reporting loans increased from 31 percent in 1964 to 42 percent in 1968 and 54 percent in 1971. Percent of students reporting non-refundable grants showed a similar increase from 29 percent in 1964 to 47 percent in 1971, whereas percent of students receiving gifts or loans from their families decreased from 71 percent to 54 percent over the same period.

In contrast to these trends, both the proportion of students receiving loans and the proportion of students receiving non-refundable grants decreased from 1971 to 1975. (Fifty percent of the students reported loans in 1975 and 45 percent reported non-refundable grants.) On the other hand, the proportion of students reporting

their own earnings and savings increased from 67 percent in 1971 to 75 percent in 1975, and the percent reporting gifts or loans from their families increased to 64 percent over this same period.

As in previous studies, marital status accounted for the largest variation in sources of income. Single students depended primarily on family gifts and loans, their own earnings and savings, and loans. In terms of the percent of total income for single students, 32 percent was from students' families, 28 percent from their own earnings and savings and 22 percent from loans. Married students reported less than 12 percent of their income from family gifts and loans, decreasing as family size increased to 6 percent for married students with two or more children. Married students with no children reported 48 percent of their income from their spouse's earnings, 19 percent from their own earnings and savings and only 9 percent from loans. As family size increased, however, the proportion of income from spouse's earnings decreased to 25 percent for married students with two or more children. At the same time, the proportion of income increased to 19 percent from loans and to 19 percent for armed forces programs.

Differences between public and private schools with respect to the pattern of income reflect the fact that the proportion of students in public schools who were married was slightly larger than for private schools (41 percent compared to 33 percent). Twenty-seven percent of the income of students in public schools was from spouse's earnings compared to only 20 percent for private schools. On the other hand, income from family gifts and loans accounted for 25 percent of the income in private schools and only 17 percent in public schools, and income from loans other than family loans comprised 18 percent of the income in private schools compared with 15 percent in public schools.

Dependence on loans was strongly related to family income, with the proportion of income obtained from loans decreasing from 29 percent for students with family income less than $5,000 to 8 percent for students with family income $25,000 or more.

Table 23

Source of Income of Medical Students by Marital Status

Source of Income	All Students	Marital Status			
		Single	Married, no children	Married, one child	Married, two or more children
Total Income	100%	100%	100%	100%	100%
Total Non-refundable	84	78	91	85	81
Own earnings and savings	23	28	19	17	20
Spouse's earnings	24	*	48	33	25
Gifts/loans from family	21	32	12	10	6
Federal Health Professions Scholarship	1	1	1	1	2
NIH-Supported Research Grants,etc.	1	1	1	*	1
Armed Forces Pay/Armed Forces Health Professions Scholarship	6	5	5	13	19
Veterans Benefits	1	1	1	3	3
Public Health Service Scholarship	2	2	2	3	1
Physician Shortage Area Scholarship	1	1	*	1	1
National Medical Fellowship	*	*	*	*	*
Robert Wood Johnson Scholarship	*	*	*	*	*
Grants from school funds	2	4	1	2	2
State Scholarship	1	1	*	1	*
Other non-refundable	1	2	1	1	1
Total Refundable	16	22	9	15	19
Federal Health Professions Loan	4	6	2	4	5
National Direct Student Loan/National Defense Education Student Loan	*	1	*	*	1
Guaranteed Loan (through school or private bank)	7	10	4	6	6
School loan	1	1	*	1	1
State loan	1	1	1	1	*
Private bank loan (not guaranteed)	1	1	1	1	2
Robert Wood Johnson Loan	*	*	*	*	*
AMA-ERF Loan	1	1	*	1	1
Personal Loan	*	*	*	*	1
Other loans	1	1	1	1	2

* = Less than 0.5 percent.

Table 24

Source of Income of Medical Students

By Control of Medical School

Source of Income	All Schools	Public Schools	Private Schools
Total Income	100%	100%	100%
Total Non-refundable funds	84	85	82
Own earnings and savings	23	24	22
Spouse's earnings	24	27	20
Gifts/loans from family	21	17	25
Federal Health Professions Scholarship	1	1	1
NIH-supported Research Grants, etc.	1	*	1
Armed Forces Pay/Armed Forces Health Professions Scholarship	6	8	5
Veterans benefits	1	1	1
Public Health Service Scholarship	2	2	2
Physician Shortage Area Scholarship	1	1	*
National Medical Fellowship	*	*	*
Robert Wood Johnson Scholarship	*	*	*
Grants from school funds	2	2	3
State scholarship	1	1	1
Other non-refundable	1	1	1
Total Refundable	16	15	18
Federal Health Professions Loan	4	4	4
National Direct Student Loan/National Defense Education Student Loan	*	*	1
Guaranteed loan (through school or private bank)	7	6	8
School loan	1	1	1
State loan	1	1	1
Private bank loan (not guaranteed)	1	1	1
Robert Wood Johnson Loan	*	*	*
AMA-ERF Loan	1	1	1
Personal loan	*	*	*
Other Loans	1	1	1

* = Less than 0.5 percent.

Table 25

Source of Income of Medical Students by Family Income

Source of Income	Total	Family Income					
		Less than $5000	$5000-$9999	$10,000-$14,999	$15,000-$19,999	$20,000-$25,000	$25,000 or more
Total Income	100%	100%	100%	100%	100%	100%	100%
Total Non-refundable	84	71	76	78	81	82	92
Own earnings and savings	23	21	17	19	20	24	27
Spouse's earnings	24	23	26	27	26	23	21
Gifts/loans from family	21	4	7	11	15	19	34
Federal Health Professions Scholarship	1	2	2	2	1	1	*
NIH-supported Research Grants, etc.	1	*	*	*	1	1	1
Armed Forces Pay/Armed Forces Health Professions Scholarship	6	3	9	9	10	6	4
Veterans benefits	1	2	2	1	1	1	1
Public Health Service Scholarship	2	1	2	2	2	2	2
Physician Shortage Area Scholarship	1	3	1	1	*	*	*
National Medical Fellowship	*	1	1	*	*	*	*
Robert Wood Johnson Scholarship	*	1	*	*	*	*	0
Grants from school funds	2	5	5	3	3	3	1
State scholarship	1	2	2	1	1	1	*
Other non-refundable	1	3	2	2	1	1	1
Total refundable	16	29	24	22	19	18	8
Federal Health Professions Loan	4	10	7	7	5	4	1
National Direct Student Loan/National Defense Education Student Loan	*	1	1	1	*	1	*
Guaranteed loan (through school or private bank	7	10	10	9	9	8	4
School loan	1	1	1	1	1	1	*
State loan	1	1	1	1	1	*	*
Private bank loan (not guaranteed)	1	1	1	1	1	1	1
Robert Wood Johnson Loan	*	*	*	*	*	*	*
AMA-ERF Loan	1	2	1	1	1	1	1
Personal loan	*	1	1	*	*	1	*
Other loan	1	2	1	1	1	1	1

* = Less than 0.5 percent.

Own Earnings and Savings

A total of 75 percent of the students surveyed reported that they had received income from their own earnings and savings during 1974-75 (Table 26). Differences between public and private schools (Table 26) and between married and single students (Table 27) in the proportion reporting income from this source were slight. However, the average amount (Tables 28 and 29) reported was consistently larger for married students than for single students and for students in private schools than for students in public schools.

Although the proportion of students reporting income from own earnings and savings showed a consistent decrease as class level increased, variation in the average amount reported was not as clearly defined. Among single students, highest average income was reported for students in the final year. On the other hand, among married students, highest average increase was reported for married students in their first year, and lowest average income for married students in the intermediate classes.

Nineteen percent of the single students and

21 percent of the married students with no children worked during the 1974-75 school year (Table 30). Both of these proportions are somewhat lower than the proportions reported as working during the 1970-71 school year (26 percent for single students, 25 percent for married students). Similar decreases were also apparent in the proportion of married students with children who were employed. For married students with one child, the proportion who worked decreased from 41 percent in 1971 to 28 percent in 1975. For married students with two or more children, the proportion decreased from 43 percent in 1971 to 26 percent in 1975. In addition, the overall median number of hours worked decreased from 14 in 1971 to 10 in 1975, and similar decreases occurred in the median hours worked for each marital status group.

Differences between public and private schools with respect to the proportion of students who worked were slight (Table 31). On the other hand, as class level increased, a consistent increase was apparent in the proportion of students who were working during school, going from 14 percent for first year students to 26 percent for students in their final year (Table 32). This trend in proportion working was apparent for both single and married students, although median hours worked showed only a slight increase for single students and no change for married students (Table 33).

Table 26

Proportion of Single and Married Medical Students Reporting Income

By Source and By Control of Medical School

Source of Income	All Medical Students			Single Medical Students			Married Medical Students		
	All Schools	Public Schools	Private Schools	All Schools	Public Schools	Private Schools	All Schools	Public Schools	Private Schools
Own earnings and savings	75	75	75	75	75	74	74	74	75
Spouse's earnings	32	34	28	1	1	1	82	82	82
Gifts/loans from family	64	60	69	73	71	76	49	46	55
F.H.P. Scholarship	8	9	7	8	9	7	8	9	7
NIH-supported grants, etc.	2	2	3	2	1	3	3	2	4
Armed Forces Pay/Scholarship	8	10	7	6	6	5	13	15	10
Veterans Benefits	3	4	2	2	3	1	6	6	4
P.H.S. Scholarship	2	2	3	2	2	2	3	2	4
P.S.A. Scholarship	1	2	1	1	1	1	2	2	1
[illegible]'l Medical Fellowship	4	1	2	5	2	3	2	1	1
R.W.J. Scholarship	2	2	1	2	3	2	1	1	1
Grants from school	16	14	19	18	16	21	13	12	16
State Scholarship	7	6	9	8	7	10	6	5	7
Other non-refundable	7	8	7	8	8	7	7	8	6
F.H.P. Loan	26	26	26	28	28	27	23	23	23
Nat'l Direct/National Def. Ed. Loan	3	2	3	3	2	3	2	2	3
Guaranteed loan	30	26	35	32	28	37	27	24	31
School loan	5	5	6	6	5	7	5	5	4
State loan	3	3	3	3	3	3	3	3	2
Private bank loan	4	4	4	3	3	4	4	4	4
R.W.J. Loan	2	2	1	2	2	1	1	1	1
AMA-ERF Loan	5	3	7	5	4	7	4	3	7
Personal loan	3	3	3	3	3	3	2	2	3
Other loans	4	4	4	4	4	4	5	5	5

Table 27

Proportion of Single and Married Medical Students Reporting Income

By Source and By Medical School Class

Source of Income	Single Medical Students				Married Medical Students			
	All Classes	First Year	Inter-mediate	Final Year	All Classes	First Year	Inter-mediate	Final Year
Own earnings and savings	75	82	72	66	74	84	73	70
Spouse's earnings	1	*	1	1	82	85	83	79
Gifts/loans from family	73	75	71	72	49	50	47	52
F.H.P. Scholarship	8	5	10	12	8	5	9	10
NIH-supported grants, etc.	2	1	3	2	3	1	4	2
Armed Forces Pay/Scholarship	6	5	6	6	13	11	14	13
Veterans benefits	2	2	2	1	6	8	6	4
P.H.S. Scholarship	2	1	2	2	3	1	5	2
P.S.A. Scholarship	1	2	1	0	2	2	2	1
Nat'l Medical Fellowship	2	3	2	*	1	2	1	*
R.W.J. Scholarship	2	2	2	2	1	2	1	1
Grants from school	18	17	19	19	13	14	14	12
State scholarship	8	8	9	8	6	5	5	7
Other non-refundable	8	8	7	8	7	8	7	7
F.H.P. loan	28	26	28	32	23	23	23	22
Nat'l Direct/National Def. Ed. Loan	3	3	3	2	2	2	2	3
Guaranteed loan	32	33	31	30	27	31	25	26
School loan	6	5	7	6	5	5	5	4
State loan	3	3	3	2	3	4	3	1
Private bank loan	3	3	3	5	4	3	4	5
R.W. J. Loan	2	1	2	2	1	1	1	1
AMA-ERF Loan	5	3	6	9	4	3	4	5
Personal loan	3	3	3	4	2	3	2	3
Other loans	4	3	4	5	5	4	5	6

* = Less than 0.5 percent

Table 28

Average Amount of Income Reported by Single and Married Medical Students

By Source and By Control of Medical School

Source of Income	All Medical Students			Single Medical Students			Married Medical Students		
	All Schools	Public Schools	Private Schools	All Schools	Public Schools	Private Schools	All Schools	Public Schools	Private Schools
Own earnings and savings	$2,767	$2,668	$2,914	$2,515	$2,334	$2,755	$3,180	$3,155	$3,226
Spouse's earnings	6,731	6,601	6,969	3,957	3,747	4,408	6,782	6,656	7,010
Gifts/loans from family	2,934	2,407	3,617	2,941	2,438	3,552	2,916	2,340	3,795
F.H.P. Scholarship	1,070	1,029	1,152	999	929	1,120	1,186	1,173	1,218
NIH-supported grants, etc.	2,175	1,317	2,790	1,775	1,108	2,196	2,658	1,533	3,595
Armed Forces Pay/Scholarship	6,878	6,748	7,159	6,441	6,067	7,061	7,178	7,150	7,251
Veterans benefits	2,672	2,622	2,795	2,097	2,025	2,273	3,013	2,976	3,104
P.H.S. Scholarship	7,611	6,789	8,464	7,606	6,805	8,447	7,616	6,772	8,481
[illegible]A. Scholarship	4,275	4,154	4,578	4,433	4,448	4,407	4,106	3,908	4,920
[illegible]'l Medical Fellowship	1,367	1,136	1,573	1,358	1,205	1,476	1,395	970	2,033
R.W.J. Scholarship	775	695	966	711	643	881	965	857	1,200
Grants from school	1,268	950	1,623	1,313	958	1,673	1,169	934	1,491
State scholarship	1,053	1,134	967	1,045	1,088	1,004	1,071	1,227	859
Other non-refundable	1,543	1,425	1,739	1,584	1,503	1,698	1,472	1,311	1,838
F.H.P. loan	1,515	1,452	1,610	1,488	1,402	1,602	1,569	1,537	1,627
Nat'l Direct/National Def. Ed. Loan	1,790	1,575	2,037	1,859	1,612	2,102	1,669	1,522	1,893
Guaranteed loan	2,056	1,805	2,337	2,059	1,782	2,332	2,052	1,844	2,348
School loan	1,118	953	1,327	1,144	980	1,314	1,065	911	1,365
State loan	1,897	1,885	1,915	1,816	1,743	1,893	2,049	2,071	1,987
Private bank loan	2,095	2,019	2,195	2,000	1,754	2,247	2,229	2,302	2,089
R.W.J. Loan	856	828	906	798	762	863	995	992	1,002
AMA-ERF Loan	1,401	1,367	1,425	1,387	1,359	1,405	1,433	1,382	1,468
Personal loan	1,379	1,147	1,703	1,358	1,129	1,697	1,424	1,190	1,715
Other loans	1,856	1,924	1,762	1,601	1,748	1,433	2,182	2,110	2,312

Table 29

Average Amount of Income Reported by Single and Married Medical Students

By Source and By Medical School Class

Source of Income	Single Medical Students				Married Medical Students			
	All Classes	First Year	Inter-mediate	Final Year	All Classes	First Year	Inter-mediate	Final Year
Own Earnings and Savings	$2,499	$2,263	$2,654	$2,701	$3,208	$3,650	$2,823	$3,349
Spouse's earnings	3,583	2,894	3,427	3,883	6,773	6,243	6,635	7,379
Gifts/loans from family	2,944	2,844	2,953	3,129	2,922	2,743	2,882	3,075
F.H.P. Scholarship	999	912	981	1,097	1,188	1,398	1,149	1,181
NIH-supported grants, etc.	1,788	1,774	1,771	1,866	2,658	3,243	2,483	2,692
Armed Forces Pay/Scholarship	6,441	6,509	6,726	5,702	7,176	5,951	7,480	7,314
Veterans benefits	2,097	1,957	2,217	2,139	3,013	2,974	3,080	2,902
P.H.S Scholarship	7,606	7,302	7,762	7,754	7,616	7,232	7,712	7,379
P.S.A. Scholarship	4,433	4,363	4,591	0	4,106	3,812	4,345	3,872
Nat'l Medical Fellowship	1,358	1,334	1,331	2,600	1,395	1,873	1,177	900
R.W.J. Scholarship	717	742	761	514	965	958	800	1,170
Grants from school	1,308	1,257	1,329	1,365	1,179	1,278	1,134	1,193
State scholarship	1,045	922	1,136	1,036	1,071	676	1,178	1,136
Other non-refundable	1,574	1,537	1,636	1,534	1,476	1,124	1,535	1,657
F.H.P. loan	1,488	1,406	1,492	1,611	1,573	1,438	1,592	1,629
Nat'l Direct/National Def. Ed. Loan	1,859	1,947	1,744	1,989	1,657	1,499	1,657	1,720
Guaranteed loan	2,060	2,084	2,033	2,065	2,056	2,043	2,008	2,132
School loan	1,139	920	1,207	1,290	1,076	992	1,152	1,021
State loan	1,816	1,810	1,871	1,673	2,049	1,627	2,461	1,588
Private bank loan	2,000	2,102	2,076	1,896	2,140	1,741	2,120	2,245
R.W.J. Loan	798	718	712	1,069	995	1,050	923	1,072
AMA-ERF Loan	1,387	1,398	1,370	1,402	1,433	1,420	1,514	1,339
Personal loan	1,363	1,419	1,393	1,208	1,413	1,210	1,393	1,575
Other loans	1,601	1,393	1,754	1,641	2,182	2,213	1,857	2,571

Table 30

Distribution of Medical Students by Average Hours Worked During 1974-75 School Term and Marital Status

Hours Worked Per Week	All Students	Marital Status			
		Single	Married, no children	Married, one child	Married, two or more children
Total Students	100%	100%	100%	100%	100%
Total who worked	20	19	19	28	26
1-9 hours	10	10	9	12	7
10-19 hours	7	6	7	10	14
20-29 hours	2	2	2	4	4
30-39 hours	1	1	1	1	0
40 hours or more	*	*	*	1	1
Total who did not work	80	81	81	72	74
Median hours worked	10	9	10	10	12

* Less than 0.5 percent.

Table 31

Proportion of Single and Married Medical Students Working During 1974-75 School Term and Median Hours Worked By Control of Medical School

Marital Status	All Schools	Public Schools	Private Schools
Single--			
Percent who worked	19	19	19
Median hours worked	9	10	8
Married, no children--			
Percent who worked	19	21	17
Median hours worked	10	10	8
Married, one child--			
Percent who worked	28	27	31
Median hours worked	10	10	8
Married, two or more children--			
Percent who worked	26	28	22
Median hours worked	12	12	10

Table 32

Distribution of Medical Students by Average Hours Worked During 1974-75 School Term and Medical School Class

Hours Worked Per Week	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
Total Students	100%	100%	100%	100%
Total who worked	20	14	21	26
1-9 hours	10	8	10	11
10-19 hours	7	5	7	8
20-29 hours	2	1	2	4
30-39 hours	1	*	*	1
40 hours or more	*	*	1	1
Total who did not work	80	86	79	74
Median hours worked	10	8	10	10

* Less than 0.5 percent.

Table 33

Proportion of Single and Married Medical Students Working During 1974-75 School Term and Median Hours Worked By Medical School Class

Marital Status	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
Single Students--				
Percent who worked	19	13	21	27
Median hours worked	9	8	8	10
Married Students--				
Percent who worked	21	18	21	25
Median hours worked	10	10	10	10

Parents or Relatives' Contributions/Gifts

In the 1975 survey, students were requested to specify the amounts of money they received from not only "parents' and relatives' contributions," but also from "spouse's parents' and/or relatives' contributions," from "other gifts," and from "family loans." All of these entries are summarized in the tables under the category "gifts/loans from family." In the 1971 survey, students were requested to provide the amount of income "contributed by parents or relatives," a figure which may not be strictly comparable to the summary category used in the 1975 survey. On the other hand, the 1968 survey requested the amount of income received as "loans and/or gifts from parents, in-laws, other relatives and friends," which may provide a more comparable figure to that used in the 1975 summary.

Sixty-four percent of the students in 1975 indicated that they had received income from parents, relatives or other gifts. This figure is comparable to the results in 1968 when 65 percent reported income from this type of source but is higher than the 54 percent figure reported in 1971. The proportion of total income obtained from this source was 21 percent, an increase of only one percentage point from the results in 1971.

Seventy-three percent of the single students reported that they received income during 1974-75 from family contributions and gifts, compared with only 49 percent of the married students. The average amount reported in 1975 was $2,941 for single students compared with $2,916 for married students. Although these figures represent a change from 1971 when the average for married students exceeded the average for single students, they are similar to the results in 1968.

Variation by class in the proportion of students and in the average amount of income from family contributions and gifts was small. Single first-year students reported the highest proportion of students (75%) receiving income from this source. A slight but consistent increase was noted in the average amount reported as class level increased, with average amounts for single students exceeding amounts reported by married students at each class level.

Spouse's Earnings

Income from spouse's earnings was reported by 82 percent of the married students in 1975, compared with 78 percent in 1971 and 80 percent in 1968. Overall average income from this source was $6,731, an increase of 49 percent from 1971.

Although the proportion of students who reported income from their spouses was the same for public and private schools, a slight decrease was noted with respect to increasing class level. As in the 1971 study, average amounts reported were higher for students in private schools than for students in public schools and for students in higher school class levels than for those in the lower classes.

Table 34

Proportion of Medical Students Reporting Income and Average Amount of Income From Each Source by Marital Status

Source of Income	All Students		Marital Status							
			Single		Married, no children		Married, one child		Married, two or more children	
	Pct	Avg	Pct	Avg	Pct	Avg	Pct	Avg	Pct	Avg
Own earnings and savings	74	$2,767	75	$2,499	76	$3,130	70	$2,908	62	$4,315
Spouse's earnings	32	6,731	1	3,583	88	6,933	67	5,821	52	6,533
Gifts/loans from family	64	2,934	73	2,944	52	2,975	40	3,008	39	2,138
F.H.P. Scholarship	8	1,070	8	999	7	1,181	10	1,054	21	1,330
NIH-supported grants, etc.	2	2,175	2	1,788	3	2,754	1	1,623	2	2,620
Army Forces Pay/Scholarship	8	6,878	6	6,441	10	6,386	22	7,266	26	9,738
Veterans benefits	3	2,672	2	2,097	4	3,033	11	2,836	13	3,234
P.H.S. Scholarship	2	7,611	2	7,606	3	7,668	4	7,637	2	6,750
P.S.A. Scholarship	1	4,275	1	4,433	2	3,837	2	4,819	2	4,540
Nat'l Medical Fellowship	2	1,367	2	1,358	1	1,996	3	1,071	3	875
R.W.J. Scholarship	2	775	2	717	1	929	2	771	2	1,400
Grants from school	16	1,268	18	1,308	12	1,061	16	1,429	18	1,420
State scholarship	7	1,053	8	1,045	5	969	7	1,522	3	906
Other non-refundable	7	1,543	8	1,574	7	1,433	8	1,323	9	2,038
F.H.P. loan	26	1,515	28	1,488	20	1,416	30	1,784	35	2,069
Nat'l Direct/National Def. Ed. Loan	3	1,790	3	1,859	2	1,565	2	1,630	5	2,022
Guaranteed loan	30	2,056	32	2,060	24	2,063	34	2,042	36	2,019
School loan	5	1,118	6	1,139	4	1,007	7	1,034	9	1,337
State loan	3	1,897	3	1,816	2	1,898	4	2,507	3	2,133
Private bank loan	4	2,095	3	2,000	3	2,097	4	2,420	10	2,092
R.W.J. Loan	2	856	2	798	1	1,010	2	733	1	1,500
AMA-ERF Loan	5	1,401	5	1,387	3	1,411	7	1,346	8	1,637
Personal loan	3	1,379	3	1,363	2	1,284	3	1,354	6	1,915
Other loans	4	1,856	4	1,601	4	1,937	6	2,028	8	3,551

Loans Outside Family

Fifty percent of the students surveyed reported that they had received income from loans outside their family during 1974-75 (Table 35), a somewhat smaller figure than the 54 percent found in 1971 but larger than the 42 percent indicated in 1968. Of the students who obtained loans during 1974-75, 60 percent received money from guaranteed student loans and 52 percent received Federal Health Professions Loans. Average amount of loans increased 165 percent from $1,310 in 1971 to an average of $2,878 in 1975.

The proportion of students reporting income from loans other than family loans was slightly higher in private schools (54 percent) than in public schools (48 percent), and the overall average amount reported was $3,259 for students in private schools compared with $2,586 for students in public schools. Comparison of loans by class yielded less consistent results than comparisons by school control (Table 36). For Federal Health Professions Loans both the proportion of students reporting the loans and the proportion of total loan funds tended to increase with class level. The proportion of students reporting guaranteed loans,

on the other hand, decreased for higher class levels, and corresponding decreases were apparent in the proportion of total loan funds.

Comparisons of results for 1971 and 1975 indicate that the proportion of students reporting income from guaranteed loans has increased considerably and the proportion of students reporting school loans, state loans and private bank loans decreased. However, it is important to note here that there is unavoidably a high degree of ambiguity with respect to loan sources and students may not be aware of the precise source of the funds they are receiving. Consequently the apparent changes in sources of loans, particularly with respect to the proportion of students reporting each source, should be interpreted cautiously since they may reflect, to some extent, changes in reporting rather than real changes in sources of income.

Average amounts of loans increased by approximately 45 percent for guaranteed loans, 35 percent for state loans and 49 percent for private bank loans; however, the average school loan decreased 12 percent from $1,269 in 1971 to $1,118 in 1975.

The proportion of students who reported receiving Federal Health Professions Loans (26 percent) was similar to the figure for 1971; however, the average amount reported increased 40 percent from $1,084 in 1971 to $1,515 in 1975.

Of the students who indicated that they had received loans, 48 percent reported loans from only one source (Tables 38 and 39). Federal Health Professions Loans were reported by 31 percent of the students with a single loan and by 71 percent of the students with more than one loan.

Table 35

Proportion of Medical Students Reporting Loans From Various Sources as Income for 1975 and Average Amount Reported By Control of Medical School

Source of Loan	All Schools	Public Schools	Private Schools
Percent of Students Reporting Loans:			
All sources	50	48	54
F.H.P. Loan	26	26	26
Nat'l Dir./Def.Ed.Loan	3	2	3
Guaranteed loan	30	26	35
School loan (not guaranteed)	5	5	6
State loan	3	3	3
Private bank loan (not guaranteed)	4	4	4
Other loans	12	11	14
Average Amount Reported:			
All sources	$2,878	$2,586	$3,259
F.H.P. Loan	1,515	1,452	1,610
Nat'l Dir./Def.Ed.Loan	1,790	1,575	2,037
Guaranteed loan	2,056	1,805	2,337
School loan (not guaranteed)	1,118	953	1,327
State loan	1,897	1,885	1,915
Private bank loan (not guaranteed)	2,095	2,019	2,195
Other loans	1,636	1,558	1,727

Table 36

Proportion of Medical Students Reporting Loans from Various Sources as Income for 1970, and Percent Distribution of Loan Money By Medical School Class

Source of Loan	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
Percent of Students Reporting Loans:				
All sources	50%	52%	49%	50%
F.H.P. Loan	26	25	26	27
Nat'l Dir./Def.Ed.Loan	3	2	3	3
Guaranteed loan	30	33	29	28
School loan (not guaranteed)	5	5	6	5
State loan	3	3	3	2
Private bank loan (not guaranteed)	4	3	3	5
Other loans	12	10	12	15
Percent Distribution of Loan Money:				
All sources	100%	100%	100%	100%
F.H.P. Loan	27	26	28	28
Nat'l Dir./Def.Ed.Loan	3	3	3	3
Guaranteed loan	43	49	41	38
School loan (not guaranteed)	4	3	5	4
State loan	4	4	4	2
Private bank loan (not guaranteed)	5	4	5	7
Other loans	14	11	14	18

Table 37

Proportion of Medical Students Reporting Loans From Various Sources as Income for 1971 and Average Amount Reported By Marital Status

Source of Loan	All Students	Marital Status			
		Single	Married, no children	Married, one child	Married, two or more children
Percent of Students Reporting Loans:					
All sources	50%	52%	43%	59%	63%
F.H.P. Loan	26	28	20	30	35
Nat'l Dir./Def.Ed.Loan	3	3	2	2	5
Guaranteed loan	30	32	24	34	36
School loan (not guaranteed)	5	6	4	7	9
State loan	3	3	2	4	3
Private bank loan (not guaranteed)	4	3	3	4	10
Other loans	12	13	9	16	21
Average Amount Reported:					
All sources	$2,878	$2,882	$2,656	$2,994	$3,966
F.H.P. Loan	1,515	1,488	1,416	1,784	2,069
Nat'l Dir./Def.Ed.Loan	1,790	1,859	1,565	1,630	2,022
Guaranteed loan	2,056	2,060	2,063	2,042	2,019
School loan (not guaranteed)	1,118	1,139	1,007	1,034	1,337
State loan	1,897	1,816	1,898	2,507	2,133
Private bank loan (not guaranteed)	2,095	2,000	2,097	2,420	2,092
Other loans	1,636	1,513	1,741	1,705	2,560

Table 38

Number and Average Amount of Loans Reported by Students in Public Medical Schools by Source of Loan and Marital Status

Number and Source of Loan	All Students		Marital Status							
			Single		Married, no children		Married, one child		Married, two or more children	
	No.	Avg	No.	Avg	No.	Avg	No.	Avg	No.	Avg
One Source:										
F.H.P. Loan	350	$1,518	213	$1,562	100	$1,330	25	$1,808	12	$1,684
Nat'l Dir./Def. Ed. Loan	36	1,508	20	1,538	11	1,319	2	1,500	3	2,000
Guaranteed loan	377	1,827	216	1,825	115	1,819	26	1,852	18	1,966
School loan (not guaranteed)	47	1,305	28	1,318	11	1,361	7	1,136	1	1,500
State loan	38	2,758	13	3,222	20	2,187	5	3,840	0	-
Private bank loan (not guaranteed)	60	2,217	29	2,091	21	1,950	6	2,517	3	1,433
Other loan	132	1,926	81	1,812	38	2,013	9	2,187	4	2,800
Two Sources:										
F.H.P. and other	534	3,022	349	2,924	118	2,946	43	3,345	22	4,398
All other	197	2,995	128	2,850	37	2,929	21	3,141	11	4,627
Three Sources:										
F.H.P. and other	183	4,140	112	3,852	39	3,989	13	5,288	19	5,362
All other	44	4,331	24	4,199	14	4,248	3	5,367	3	4,733
Four Sources:										
F.H.P. and other	48	5,682	30	5,257	11	6,854	4	5,158	3	6,303
All other	2	2,050	0	-	2	2,050	0	-	0	-
Five Sources:										
F.H.P. and other	10	6,520	7	5,749	0	-	1	7,000	2	8,978
All other	0	-	0	-	0	-	0	-	0	-
Six or More Sources:										
F.H.P. and other	0	-	0	-	0	-	0	-	0	-
All other	0	-	0	-	0	-	0	-	0	-

Table 39

Number and Average Amount of Loans Reported by Students

in Private Medical Schools by Source of Loan and Marital Status

Number and Source of Loan	All Students		Marital Status							
			Single		Married, no children		Married, one child		Married, two or more children	
	No.	Avg	No.	Avg	No.	Avg	No.	Avg	No.	Avg
One Source:										
F.H.P. Loan	192	$1,803	126	$1,821	50	$1,796	10	$1,811	5	$1,260
Nat'l Dir./Def.Ed.Loan	31	2,078	20	2,269	7	1,793	4	1,625	0	-
Guaranteed Loan	327	2,298	215	2,315	93	2,342	11	2,091	6	1,833
School loan (not guaranteed)	35	2,124	23	2,196	9	1,814	2	2,825	1	1,865
State loan	18	3,011	15	2,723	3	4,450	0	-	0	-
Private bank loan (not guaranteed)	40	2,569	19	3,221	17	1,945	3	2,333	1	1,500
Other loan	72	1,848	46	1,562	18	2,414	5	2,492	3	1,767
Two Sources:										
F.H.P. and other	343	3,638	240	3,657	76	3,410	19	4,169	6	3,883
All other	244	3,842	165	3,754	57	4,014	13	3,238	8	5,490
Three Sources:										
F.H.P. and other	167	4,645	126	4,656	25	4,278	7	4,007	9	6,006
All other	46	5,601	34	5,329	5	5,630	4	5,463	3	8,823
Four Sources:										
F.H.P. and other	43	6,657	32	6,298	7	7,511	1	6,000	3	8,717
All other	5	5,392	5	5,392	0	-	0	-	0	-
Five Sources:										
F.H.P. and other	7	6,886	5	6,340	2	8,250	0	-	0	-
All other	2	7,025	1	7,300	1	6,750	0	-	0	-
Six or More Sources:										
F.H.P. and other	1	6,400	1	6,400	0	-	0	-	0	-
All other	0	-	0	-	0	-	0	-	0	-

Non-refundable Grants

Nine percent of the income reported by medical students in the 1975 survey was from non-refundable grants other than armed forces scholarships or veterans benefits*. When income from these sources is also included, the proportion of income from non-refundable sources amounts to 12 percent of the total income, an increase from 12 percent reported in 1971.

Federal and state sources of non-refundable funds accounted for about 12 percent of medical students' income, whereas school funds, private funds and other miscellaneous sources accounted for 4 percent. Federal Health Professions Scholarships accounted for one percent of students' total income, a decrease from 3 percent reported in 1971.

By medical school class, both Federal Health Professions Scholarships and Armed Forces Pay/Scholarship showed increases in the proportion of students reporting income from these sources as class level increased (Table 40). Federal Health Professions Scholarships were reported by 5 percent of the first year students and by 11 percent of the final year students.

* Derived from Table 23.

Corresponding percentages for Armed Forces Pay/Scholarship were 7 percent for first year students and 10 percent for students in their final year. Other non-refundable sources showed little difference by class in the proportion of students reporting each source except for National Medical Fellowships which showed a slight but consistent decrease with increasing class level.

Although some variation occurred in the average amount of grants with respect to class level (Table 41), the largest differences in average amounts occurred between the various programs. Scholarship programs providing the largest average amounts of money were Public Health Service Scholarships, armed forces programs and the Physician Shortage Area Program. Average amounts reported from these sources were $7,611 for the Public Health Service Scholarships, $6,878 for the armed forces programs, and $4,275 for Physician Shortage Area Scholarships.

Overall average amounts of grants were consistently larger for private schools than for public schools. With respect to class level, average amounts reported were frequently larger for the intermediate classes than for students in the first or final years.

Table 40

Proportion of Medical Students With Grants from Various Sources

By Control of School and Medical School Class

Control of Medical School and Source of Grant	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
All Schools: All Sources	45%	41%	47%	47%
F.H.P. Scholarship	8	5	9	11
NIH-supported grant	2	1	3	2
Armed Forces Pay/Scholarship	8	7	9	10
P.H.S. Scholarship	2	1	3	2
P.S.A. Scholarship	1	2	1	1
Nat'l Med. Fellowship	2	3	2	*
R.W.J. Scholarship	2	2	2	2
School Grant	16	16	17	15
State Scholarship	7	7	7	7
Other grants	7	8	7	7
Public Schools: All Sources	44	39	47	45
F.H.P. Scholarship	9	5	10	13
NIH-supported grant	2	1	2	1
Armed Forces Pay/Scholarship	10	7	10	12
P.H.S. Scholarship	2	1	3	1
P.S.A. Scholarship	2	2	2	1
Nat'l Med. Fellowship	1	2	1	*
R.W.J. Scholarship	2	3	2	2
School grant	14	15	15	13
State scholarship	6	5	7	6
Other grants	8	8	7	8
Private Schools: All Sources	47	43	48	48
F.H.P Scholarship	7	5	7	9
NIH-supported grant	3	2	4	4
Armed Forces Pay/Scholarship	7	6	7	7
P.H.S. Scholarship	3	1	4	3
P.S.A. Scholarship	1	2	1	*
Nat'l Med. Fellowship	2	3	3	*
R.W.J. Scholarship	1	1	1	2
School grant	19	19	19	19
State Scholarship	9	9	8	8
Other grants	7	8	6	7

* Less than 0.5 percent

Table 41

Average Amounts of Grants From Various Sources Reported By Medical Students By Control of School and Medical School Class

Control of Medical School and Source of Grant	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
All Schools: All Sources	$3,054	$2,624	$3,310	$3,068
F.H.P. Scholarship	1,070	1,034	1,042	1,136
NIH-supported grant	2,175	2,117	2,108	2,302
Armed Forces Pay/Scholarship	6,878	6,284	7,192	6,830
P.H.S. Scholarship	7,611	7,284	7,734	7,572
P.S.A. Scholarship	4,275	4,214	4,460	3,872
Nat'l Med. Fellowship	1,367	1,425	1,293	1,467
R.W.J. Scholarship	775	796	769	740
School grant	1,268	1,259	1,268	1,293
State scholarship	1,053	881	1,148	1,085
Other grants	1,543	1,447	1,597	1,593
Public Schools: All Sources	2,964	2,448	3,170	3,100
F.H.P. Scholarship	1,029	980	1,005	1,102
NIH-supported grant	1,317	1,546	1,205	1,291
Armed Forces Pay/Scholarship	6,748	5,923	7,057	6,802
P.H.S. Scholarship	6,789	5,466	7,032	6,596
P.S.A. Scholarship	4,154	4,271	4,277	3,580
Nat'l Med. Fellowship	1,136	1,132	1,191	667
R.W.J. Scholarship	695	816	667	463
School grant	950	948	959	938
State scholarship	1,134	1,060	1,134	1,224
Other grants	1,425	1,325	1,534	1,361
Private Schools: All Sources	3,179	2,828	3,536	3,026
F.H.P. Scholarship	1,152	1,106	1,129	1,204
NIH-supported grant	2,790	2,553	2,847	2,747
Armed Forces Pay/Scholarship	7,159	6,844	7,511	6,896
P.H.S. Scholarship	8,464	8,772	8,594	8,292
P.S.A. Scholarship	4,578	4,130	5,100	5,334
Nat'l Med. Fellowship	1,573	1,693	1,381	2,267
R.W.J. Scholarship	966	741	1,043	1,133
School grant	1,623	1,567	1,663	1,627
State Scholarship	967	752	1,167	943
Other grants	1,739	1,614	1,715	1,991

Other Sources of Income

Seven percent of the students surveyed reported income from sources not listed on the questionnaire as separate categories. These sources accounted for one percent of the total income and averaged $1,543 per student.

Income from "other loans" was reported by four percent of the survey sample and accounted for another one percent of the total income. Average amount reported from this source was $1,856, ranging from $1,601 for single students to $3,551 for married students with two or more children.

Deficits and Surpluses for 1974-75 School Year

The proportion of students who report a balance between income and expenses has decreased markedly from 58 percent in 1964 to 12 percent in 1975 (Table 42). At the same time, the proportion of students who were able to balance their expenses without loans decreased from 43 percent in 1964 (or 74 percent of the students whose accounts balanced) to 5 percent in 1975 (or 42 percent of the students whose accounts balanced). On the other hand, the proportion of students with income greater than expenses has increased from 30 percent in 1964 to 61 percent in 1975. The remaining 27 percent of the surveyed students reported expenses greater than income. Although this figure is larger than that reported in 1964 or 1968, it is substantially less than the 37 percent reported in 1971.

Table 42

Comparison of Distribution of Medical Students by

Relationship Between Income and Expenses

1964, 1968, 1971 and 1975

Relationship Between Income and Expenses	1964	1968	1971	1975
Total	100%	100%	100%	100%
In Balance	58	45	18	12
with loans	15	16	8	7
without loans	43	28	10	5
Income exceeds expenses	30	38	45	61
Expenses exceed income	12	17	37	27

Single students showed the highest proportions of students with deficits (31 percent) and with balanced budgets (16 percent) and the lowest proportion of students with surpluses (47 percent). These results probably reflect the fact that single students lack spouse's income which provides a substantial amount of the income of married students, but the deficits are partially made up by support from parents.

Sixteen percent of the single students and 6 to 10 percent of the married students reported balanced budgets in 1975. These figures continue the trend noted in the 1971 study in which the corresponding percentages were 26 percent for single students and 8 to 17 percent for married students.

Deficits

Although single students, consistently showed the highest proportion of students with deficits[1] for all class levels and married students with no children consistently had the lowest proportion with deficits (Table 43), the overall average amount of deficit was lowest ($1,292) for single students and highest ($1,964) for students who were married but had no children. Average deficits of students in private schools were consistently higher than those of students in public schools (Table 44) and proportionately more of the students in private schools showed deficits than in public schools.

[1] Deficit was defined as difference between expenses and income greater than $100.

Table 43

Proportion of Medical Students Reporting Expenses in Excess of Income and Average Deficits by Marital Status and Medical School Class

Marital Status	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
Percent of students with deficits:[1]				
All students	27	27	27	25
Single	31	30	31	33
Married, no children	18	20	18	16
Married, one child	25	26	25	22
Married, two or more children	21	11	30	15
Average deficit:				
All students	$1,457	$1,413	$1,438	$1,550
Single	1,292	1,348	1,249	1,259
Married, no children	1,964	1,762	1,830	2,388
Married, one child	1,766	1,546	2,095	1,463
Married, two or more children	1,473	1,080	1,635	1,194

[1] Deficit was defined as difference between expenses and income greater than $100.

Table 44

Proportion of Medical Students Reporting Expenses in Excess of Income and Average Deficits by Marital Status and Control of Medical School

Marital Status	All Schools	Public Schools	Private Schools
Percent of students with deficits:(1)			
All students	27	25	29
Single	31	30	33
Married, no children	18	16	21
Married, one child	25	22	29
Married, two or more children	21	19	27
Average deficit:			
All students	$1,457	$1,288	$1,669
Single	1,292	1,132	1,485
Married, no children	1,964	1,774	2,210
Married, one child	1,766	1,544	2,134
Married, two or more children	1,473	1,267	1,827

(1) Deficit was defined as difference between expenses and income greater than $100.

Surpluses

Sixty-one percent of the medical students in 1975 reported income in excess of expenses[1] (Table 45), a substantial increase from 45 percent shown in 1971. In addition, the average amount of surplus increased by more than 100 percent from $1,594 in 1971 to $3,566 in 1975.

Increases in the proportion of students with surpluses with respect to marital status ranged from 15 percentage points for married students with no children to 23 percentage points for married students with two or more children. Increases in the amount of surplus were greatest for married students with two or more children ($4,299 in 1975 compared to $1,018 in 1971) and least for single students ($2,464 in 1975 compared to $863 in 1971).

The proportion of students with surpluses was slightly higher (4 to 8 percentage points) in public schools than in private schools, and except for married students with no children, the average amount of surplus was slightly larger for students in public schools than for students in private schools.

[1] Surplus was defined as difference between income and expenses greater than $100.

With respect to medical school class (Table 46), both first-year and final-year classes reported increases of approximately 20 percentage points in the proportion of students with surpluses, and average amount of surplus increased by approximately $1,800 to $1,900 for each group. Intermediate students showed slightly smaller increases in the proportion reporting surpluses and slightly larger increases in the average amount of surplus.

Among single students, the proportion with surpluses showed a slight but consistent decrease with increasing class level in 1975. Corresponding results from the 1971 survey showed an increase in the proportion of single students at each class level who reported surpluses.

Table 45

Proportion of Medical Students Reporting Income in Excess of Expenses and Average Surpluses by Marital Status and Control of Medical School

Marital Status	All Schools	Public Schools	Private Schools
Percent of students with surplus:(1)			
All students	61	64	58
Single	53	55	51
Married, no children	76	78	73
Married, one child	70	73	65
Married, two or more children	69	70	66
Average surplus:			
All students	$3,648	$3,697	$3,568
Single	2,4[illegible]	2,421	2,523
Married, no children	5,[illegible]	5,204	5,167
Married, one child	4,337	4,185	4,700
Married, two or more children	4,299	4,263	4,393

(1) Surplus was defined as difference between income and expenses greater than $100.

Table 46

Proportion of Medical Students Reporting Income in Excess of Expenses and Average Surpluses by Marital Status and Medical School Class

Marital Status	All Classes	Medical School Class		
		First Year	Intermediate	Final Year
Percent of students with surpluses:(1)				
All students	61	59	61	65
Single	53	54	53	52
Married, no children	76	74	76	79
Married, one child	70	64	70	74
Married, two or more children	69	74	62	74
Average surplus:				
All students	$3,648	$3,037	$3,785	$4,145
Single	2,464	2,185	2,736	2,393
Married, no children	5,191	5,291	4,952	5,530
Married, one child	4,337	3,599	4,269	4,722
Married, two or more children	4,299	4,046	5,010	3,768

(1) Surplus was defined as difference between income and expenses greater than $100.

In 1975, 32 percent of the students who came from families with incomes of less than $10,000 reported expenses that exceeded their incomes (Table 47). This figure shows a substantial reduction from the almost 45 percent reported in 1971. For students who came from families with incomes less than $15,000, over 30 percent reported expenses in excess of income in 1965, whereas more than 62 percent of the students from families with income $15,000 or more reported surpluses in 1975. Dependence on loans, however, was consistently apparent for students from families with income less than $25,000.

Table 47

Distribution of Medical Students by Relationship Between Income and Expenses and Family Income

Relationship Between Income and Expenses	All Students	Family Income				
		Under $5000	$5000-$9999	$10,000-$14,999	$15,000-$24,999	$25,000 or more
Total	100%	100%	100%	100%	100%	100%
In balance[1]	12	12	12	10	12	12
with loans	7	10	10	7	8	4
without loans	5	2	2	3	4	8
Income exceeds expenses	61	55	58	59	62	64
Expenses exceed income	27	33	30	31	26	24

[1] Expenses and income were considered to be "in balance" if the difference was $100 or less.

Indebtedness

Sixty-seven percent of the students in 1975 reported debts (Table 48), a slight increase over 65 percent shown in 1971. However, the average amount of indebtedness reported increased from $4,289 in 1971 to $6,652 in 1975, a 32 percent increase.

With respect to marital status (Table 49), the proportion of students with debts ranged from 63 percent for single students to 84 percent for married students with one child. The average amount of indebtedness was similar (about $6,300) for single students and for married students with no children. Married students with two or more children reported the highest indebtedness, averaging $10,972.

Both the proportion of students with debts and the average amount of indebtedness showed consistent increases with class level. The proportion with debts ranged from 62 percent for first year students to 71 percent for students in the final year. Average amount reported ranged from $4,320 to $9,021.

Table 48

Proportion of Medical Students with Debts and Average Amount of Debt Reported by Marital Status

Marital Status	Proportion of Students with Debts	Average Amount of Debt
All students	67	$ 6,652
Single	63	6,328
Married, no children	70	6,397
Married, one child	82	8,010
Married, two or more children	82	10,972

Table 49

Proportion of Medical Students with Debts and Average Amount of Debt Reported by Medical School Class

Medical School Class	Proportion of Students Reporting Debts			Average Amount of Debts Reported		
	1968	1971	1975	1968	1971	1975
All classes	44%	65%	67%	$3,046	$4,289	$6,652
First year	25	61	62	1,557	2,975	4,320
Intermediate	47 52	62 68	67	2,088 3,420	3,545 5,194	6,825
Final year	52	72	71	4,397	5,504	9,021

APPENDIX

Statistical Comparisons

APPENDIX

Summary of Statistical Comparisons

I. Introduction

Presented in this section are the results of comparisons of data from several sources which provide an indication of the general validity of the survey sample. Sources of data for which these comparisons were made include:

(1) the "national sample" consisting of 7,261 student respondents to the 1974-75 survey, representing 15 percent of the enrollment of each medical school;

(2) the "monitored sample," a subsample of the national sample consisting of 417 students whose completed questionnaires were screened by school officials before they were returned;

(3) the "non-monitored sample" consisting of the remaining 6,844 questionnaires in the national sample;

(4) data from the 1974-75 AAMC fall enrollment questionnaire; and

(5) data on scholarships and loans from the 1974-75 edition of JAMA based on information from 109 schools (51,721 students).*

Statistical tests using the chi-square distribution were performed to compare background characteristics (sex distribution, class distribution, and ethnic background) for the national sample and the fall enrollment data. Chi-square comparisons were also made between the monitored and non-monitored samples for these characteristics and for marital status, family

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* "Medical Education in the United States, 1974-1975," JAMA, December 29, 1975, Vol. 234, No. 13

income, size of hometown, and average annual expenses. Comparisons using the binomial distribution were made on the percent of students with income from selected sources as reported in the national sample and in the JAMA data. Similar binomial comparisons were performed for the monitored and non-monitored samples, with additional comparisons (using the chi-square statistic) of employment and indebtedness.

II. Comparisons of national sample with distributions from the fall enrollment questionnnaire.

Comparisons were made for distributions of students by class, by sex, and by self-description. Results of χ^2-tests indicated that the national sample was significantly different (at the five percent level) from the fall enrollment results for all three variables. (See Tables A-2, A-4 and A-11.) By class, there were more first-year students, fewer intermediate students and about the same proportion of final-year students in the national sample as compared with the fall enrollment questionnaire (Table A-1). Comparisons by sex and by self-description (Tables A-3, A-4, A-10 and A-11) indicated a smaller proportion of women and blacks in the national sample and a slightly larger proportion of males, white/caucasians, and students classifying themselves as other than "black" or "white."

III. Comparisons of monitored and non-monitored samples.

A. Background information

Chi-square tests comparing distributions of students by class, by sex, by self-description, and by marital status (Tables A-2, A-4, A-6, and

A-11) indicated no significant differences between the monitored and non-monitored samples except for marital status which was significantly different at the ten percent level ($.05 < p < .10$) (Table A-6). Comparisons of the percent of monitored and non-monitored students who were married, using the binomial distribution (Table A-8), indicated significantly more married students in the monitored sample at the one percent level. Similar comparisons of the percent of monitored and non-monitored students who were married, broken down for public and private schools separately and for men and women separately, indicated significant differences for men and for students in public schools (with more married students in the monitored group in each case) but that results for women and for students in private schools showed no difference between the monitored and non-monitored samples (Table A-8).

Comparisons of the distribution of students by size of hometown (Tables A-12 and A-13) and by family income (Tables A-14 and A-15) indicated some difference (at the five percent level) between monitored and non-monitored students with respect to size of hometown but no difference with respect to family income. Inspection of the distributions of students by size of hometown suggests that the differences are the result of a larger proportion of monitored students from small towns and from farm, rural and unincorporated areas and a smaller proportion from suburbs of larger cities.

Non-statistical comparisons of distributions by father's occupation and mother's occupation (Tables A-16 and A-17) indicated that the monitored sample contained a slightly smaller proportion of students whose fathers were professionals in non-health-related fields and a slightly larger

proportion of students whose mothers were homemakers. Comparisons by father's education and mother's education (Tables A-18 and A-19) showed a higher proportion of students in the non-monitored sample whose parents had received college-level training (for both father's education and mother's education).

B. Expenses

A χ^2-test comparing the distribution of total annual expenses (Tables A-20 and A-21) indicated only marginal differences ($.05 < p < .10$) between the monitored and non-monitored students. Additional χ^2-tests for single students and married students separately indicate that the difference in total annual expenses was the result of differences in the proportion of married students in the monitored and non-monitored samples. If necessary, t-tests or ANOVA could be performed later but would require the special calculation of standard deviations from the data file.

Non-statistical comparisons of average annual expenses by marital status and class (Table A-22), by marital status and sex (Table A-23), by marital status and self-description (Table A-24), by geographic division (Table A-25) and by expense item (Table A-26) indicate no consistent differences between the monitored and non-monitored samples.

C. Sources of income

Comparisons of the percent of monitored and non-monitored students reporting each source using the binomial distribution (Tables A-28 and A-33) showed the following results:

Different at 1% level:

Other non-repayable funds (monitored > non-monitored)

Different at 5% level:

Own earnings and savings	(non-monitored > monitored)
Spouse's earnings	(monitored > non-monitored)
NIH-supported grants	(")
Grants from school funds	(")
School loan	(")

Different at 10% level:

F.H.P. scholarship	(non-monitored > monitored)
NMF	(monitored > non-monitored)
State scholarship	(non-monitored > monitored)
FHP loan	(monitored > non-monitored)

Although these differences were statistically significant, there did not appear to be any consistent trend with respect to the direction of the differences. Percentages of students receiving funds from the above 10 sources were higher among the monitored students than among the non-monitored students for seven of the 10 and lower for the remaining three.

Comparisons of percent of students who worked, distribution by average hours worked, distribution by relationship between income and expenses, and percent of students with debts showed no significant differences between monitored and non-monitored students (Tables A-34 through A-38).

IV. Comparison of national sample with JAMA (source of income).

Comparisons of the national sample and JAMA data with respect to the percent of students reporting selected sources (Tables A-28 and A-33) indicated significant differences (at the one percent level) with respect

to several of the income sources. The percent of students was lower in the national sample than the JAMA data indicated for Federal Health Professions Scholarships, National Medical Fellowships, Robert Wood Johnson Scholarships, grants from school funds, Federal Health Professions Loans, school loans and Robert Wood Johnson Loans. The percent of students reporting Physician Shortage Area Scholarships was higher in the national sample than was reported in JAMA. Differences for Public Health Service Scholarships, guaranteed loans and AMA-ERF loans were not statistically significant.

Possible reasons for the above discrepancies include the following:

1) Due to the underrepresentation of blacks and women in the national sample, the percent of students reporting aid from National Medical Fellowships, Robert Wood Johnson and federal sources would naturally be smaller than in the JAMA report provided by 51,721 students in 109 schools.
2) Some errors may be present in the JAMA reports: In the 1973-74 report, a number of errors were discovered by the AAMC, and these were corrected, in part, in this year's JAMA report.

V. Conclusion

Comparisons of the monitored and non-monitored samples indicated fairly good internal consistency within the national samples with respect to all variables except marital status in which the monitored sample contained a larger proportion of married students than the non-monitored sample.

Comparisons of the national sample with data from other sources identified a number of differences which were noteworthy. Specifically, both women and

black students appear to be somewhat underrepresented in the national sample, and first-year students appear to be slightly overrepresented. Comparisons between the national sample and JAMA data indicated highly significant differences in the proportion of students reporting selected sources of income. However, these differences, if real, can be explained in part by the underrepresentation of women and blacks in the national sample.

Incidentally, the new contract currently being negotiated between the AAMC and BHM calls for additional comparisons between a) the 1974-75 financial aid survey, b) other sources of financial aid data, and c) results of the LCME questionnaires from which the JAMA data are derived.

Based on the present evidence contained in this appendix, however, it appears to the writers that the national sample presents a reasonably representative picture of How Medical Students Financed Their Education in 1974-75. Although there are some statistically significant differences between the national, monitored, non-monitored, fall enrollment, and JAMA data, the practical significance of these differences does not appear to be great and can usually be explained.

If anything, the underrepresentation of blacks and of women may present a conservative picture of the actual financial needs of today's medical students. The discrepancies between the national and JAMA data are of questionable reliability at this point in time but will warrant further investigation.

Table A-1

Comparison of Distribution by Class

Sample	Class Level			Total
	First Year	Intermediate	Final Year	
Monitored	31%	43%	26%	100%
Non-Monitored	31	46	23	100
National	31	46	23	100
Fall Enrollment	28	48	24	100

Table A-2

Results of Chi-square Tests Comparing Distribution by Class

Groups Compared	χ^2-Value	df	Significance Level
Monitored/ Non-Monitored	1.904	2	$.250 < p < .500$
National Sample/ Fall Enrollment	42.53	2	$p < .005$

Table A-3

Comparison of Distribution by Sex

Sample	Men	Women	Total
Monitored	83%	17%	100%
Non-Monitored	83	17	100
National	83	17	100
Fall Enrollment	82	18	100

Table A-4

Results of Chi-square Tests Comparing

Distribution by Sex

Groups Compared	χ^2-value	df	Significance Level
Monitored/ Non-Monitored	0.006	1	$.900 < p < .950$
National Sample/ Fall Enrollment	4.347	1	$.025 < p < .050$

Table A-5

Comparison of Distribution by Marital Status and Sex

Sample	Marital Status				Total
	Single	Married, no children	Married, one child	Married, two or more children	
Men:					
Monitored	53%	34%	9%	4%	100%
Non-Monitored	60	31	6	3	100
National	59	31	6	4	100
Women:					
Monitored	71	25	0	4	100
Non-Monitored	75	21	2	2	100
National	75	21	2	2	100

Table A-6

Results of Chi-square Tests Comparing Distribution by Marital Status

Groups Compared	χ^2-value	df	Significance Level
Monitored/ Non-Monitored	7.42	3	$.050 < p < .100$

Table A-7

Comparison of Distribution by Marital Status

and School Control

School Control and Sample Designation	Total	Marital Status			
		Single	Married, no children	Married, one child	Married, two or more children
All Schools:					
Monitored	100%	56%	33%	7%	4%
Non-Monitored	100	62	29	6	3
National	100	62	29	6	3
Public Schools:					
Monitored	100	50	36	9	5
Non-Monitored	100	59	31	6	4
National	100	59	31	6	4
Private Schools:					
Monitored	100	65	28	4	3
Non-Monitored	100	67	27	4	2
National	100	67	27	4	2

Table A-8

Results of Binomial Tests Comparing

the Percent of Students Who Were Married

Group Compared	Percent Married		z-value (Normally Distributed)	Significance Level
	Monitored	Non-Monitored		
Men	47.2	40.3	2.502	$p \approx .012$
Women	29.2	25.5	0.670	$p \approx .503$
Public Schools	50.2	40.6	2.941	$p \approx .003$
Private Schools	34.9	33.4	0.409	$.682 < p < .689$
All Students	44.1	37.7	2.554	$p \approx .010$

Table A-9

Comparison of Distribution by Self-Description and School Control

School Control and Sample Designation	Total	Self-Description								
		Black/ Afro-Am.	Am. Ind.	White/ Cauc.	Mex-Am./ Chicano	Oriental/ Asian-Am.	P.R. (Main.)	P.R. (Com.)	Cuban	Other
All Schools:										
Monitored	100%	4%	1%	91%	1%	2%	0	0	*	1%
Non-Monitored	100	4	*	89	1	3	*	1	*	2
National	100	4	*	89	1	3	*	1	*	2
Public Schools:										
Monitored	100	3	*	93	1	1	0	0	*	2
Non-Monitored	100	3	*	90	1	2	*	1	1	2
National	100	3	*	91	1	2	*	1	*	2
Private Schools:										
Monitored	100	5	1	87	2	4	0	0	0	1
Non-Monitored	100	6	*	87	1	3	*	*	*	3
National	100	6	1	87	1	3	*	*	*	2

* = Less than 0.5 percent

Table A-10

Comparison of Distribution by Self-Description

Sample	Total	Black/ Afro-Am.	White/ Caucasian	Other
Monitored	100%	4%	91%	5%
Non-Monitored	100	4	89	7
National	100	4	89	7
Fall Enrollment	100	7	88	5

Table A-11

Results of Chi-square Tests Comparing

Distribution by Self-Description

Groups Compared	χ^2-value	df	Significance Level
Monitored/ Non-Monitored	1.567	2	$.250 < p < .500$
National/ Fall Enrollment	116.64	2	$p \approx .005$

Table A-12

Comparison of Distribution by Size of Hometown and School Control

School Control and Sample Designation	Total	Size of Hometown					
		Large city	Suburb	Moderate-sized city	Small city	Small town	Farm, Rural, Unincorporated
All Schools:							
Monitored	100%	23%	18%	19%	16%	16%	8%
Non-Monitored	100	21	23	20	18	13	5
National	100	22	22	20	17	13	6
Public Schools:							
Monitored	100	18	14	20	19	19	10
Non-Monitored	100	18	19	22	19	15	7
National	100	18	19	22	19	15	7
Private Schools:							
Monitored	100	29	25	18	12	11	5
Non-Monitored	100	26	28	17	15	10	4
National	100	26	28	17	15	10	4

Table A-13

Results of Chi-square Comparisons of Distribution by Size of Hometown

Groups Compared	χ^2-value	df	Significance Level
Monitored/ Non-Monitored	12.21	5	$.025 < p < .050$

Table A-14

Comparison of Distribution by Family Income and School Control

School Control and Sample Designation	Total	Family Income										
		< $5000	$5000-$7499	$7500-$9999	$10,000-$12,499	$12,500-$14,999	$15,000-$19,999	$20,000-$24,999	$25,000-$29,999	$30,000-$49,999	$50,000-$99,999	$100,000 or more
All Schools:												
Monitored	100%	5%	7%	7%	10%	9%	16%	11%	10%	13%	11%	1%
Non-Monitored	100	6	4	6	9	9	15	13	9	16	10	3
National	100	6	5	6	9	9	15	13	9	15	10	3
Public Schools:												
Monitored	100	6	6	8	11	9	18	10	9	13	9	1
Non-Monitored	100	6	4	6	9	10	16	14	9	15	9	2
National	100	6	5	6	9	10	16	14	9	14	9	2
Private Schools:												
Monitored	100	4	7	6	9	9	14	13	10	12	15	1
Non-Monitored	100	5	4	6	8	8	14	13	9	17	12	4
National	100	5	4	6	8	8	14	13	9	17	12	4

Table A-15

Results of Chi-square Comparisons of Distribution

by Family Income

Groups Compared	χ^2-value	df	Significance Level
Monitored/Non-Monitored	15.77	10	$.100 < p < .250$

Table A-16

Comparison of Distribution by Father's Occupation and School Control

School Control and Sample Designation	Total	Father's Occupation											
		Clerical	Farmer/Farm Manager	Farm Foreman or Laborer	Physician	Other Health Prof.	Other Health Worker	Home-maker	Owner/ Manager/ Admin.	Prof.- Non-Health	Sales	Skilled Worker	Trans. or Equip. Operator	Unskilled
All Schools:														
Monitored	100%	3%	5%	0%	14%	5%	1%	0%	24%	24%	7%	9%	2%	6%
Non-Monitored	100	3	3	*	14	4	1	*	23	29	7	9	2	5
National	100	3	3	*	14	4	1	*	23	29	7	9	2	5
Public Schools:														
Monitored	100	3	7	0	13	4	2	0	22	26	6	9	2	6
Non-Monitored	100	3	4	*	12	3	2	*	23	29	7	10	2	5
National	100	3	4	*	12	3	2	*	23	29	7	10	2	5
Private Schools:														
Monitored	100	4	2	0	15	6	1	0	26	22	8	8	2	6
Non-Monitored	100	3	2	*	17	4	1	0	22	29	6	9	2	5
National	100	3	2	*	17	4	1	0	23	28	6	9	2	5

* = Less than 0.5 percent

Table A-17

Comparison of Distribution by Mother's Occupation and School Control

School Control and Sample Designation	Total	Mother's Occupation												
		Clerical	Farmer/Farm Manager	Farm Foreman or Laborer	Physician	Other Health Prof.	Other Health Worker	Home-maker	Owner/ Manager/ Admin.	Prof.- Non-Health	Sales	Skilled Worker	Trans. or Equip. Operator	Unskilled
All Schools:														
Monitored	100%	15%	*	0%	*	1%	7%	55%	3%	11%	1%	2%	0%	5%
Non-Monitored	100	13	*	*	*	1	8	49	4	15	3	2	*	5
National	100	14	*	*	*	1	8	49	4	15	3	1	*	5
Public Schools:														
Monitored	100	17	*	0	*	1	8	52	4	11	*	1	0	6
Non-Monitored	100	13	*	*	*	1	8	49	4	14	3	2	*	6
National	100	14	*	*	*	1	8	49	4	14	3	1	*	6
Private Schools:														
Monitored	100	13	0	0	0	1	5	59	1	11	3	3	0	4
Non-Monitored	100	13	*	*	*	1	8	49	4	16	3	1	*	5
National	100	13	*	*	*	1	8	50	4	15	3	2	*	4

* = Less than 0.5 percent

Table A-18

Comparison of Distribution by Education of Father and School Control

School Control and Sample Designation	Total	Education Level of Father							
		Eighth Grade or Less	Some H. S.	Completed H. S.	Specialized Tech./Bus.	Some College	Completed College	Some Grad./Prof.	Completed Grad./Prof.
All Schools:									
Monitored	100%	9%	5%	17%	6%	11%	16%	7%	29%
Non-Monitored	100	7	5	15	5	13	17	6	32
National	100	7	5	15	5	13	17	6	32
Public Schools:									
Monitored	100	10	4	17	7	11	16	7	28
Non-Monitored	100	7	6	16	5	13	17	6	30
National	100	8	5	16	5	13	17	6	30
Private Schools:									
Monitored	100	7	5	17	5	12	15	7	32
Non-Monitored	100	6	6	13	4	12	16	7	36
National	100	6	6	13	5	12	16	7	35

Table A-19

Comparison of Distribution by Education of Mother and School Control

School Control and Sample Designation	Total	Education Level of Mother							
		Eighth Grade or Less	Some H.S.	Completed H. S.	Specialized Tech./Bus.	Some College	Completed College	Some Grad./Prof.	Completed Grad./Prof.
All Schools:									
Monitored	100%	5%	5%	30%	8%	16%	18%	8%	10%
Non-Monitored	100	4	5	26	8	19	20	7	11
National	100	4	5	26	8	19	20	7	11
Public Schools:									
Monitored	100	5	6	28	10	17	17	9	8
Non-Monitored	100	5	5	26	9	19	19	8	9
National	100	5	5	26	9	19	19	8	9
Private Schools:									
Monitored	100	5	3	34	5	15	20	6	12
Non-Monitored	100	4	5	24	7	19	20	7	14
National	100	4	5	25	7	18	20	7	14

Table A-20

Comparison of Distribution of Average Annual Expenses

Sample	< $3000	$3000-$3999	$4000-$4999	$5000-$5999	$6000-$6999	$7000-$7999	$8000-$9999	$10,000 or more	Total
All Students:									
Monitored	5%	11%	8%	14%	14%	13%	19%	16%	100%
Non-Monitored	5	8	13	15	16	13	16	14	100
Single Students:									
Monitored	9	16	12	20	16	12	12	3	100
Non-Monitored	7	12	19	19	19	12	9	3	100
Married Students:									
Monitored	1	4	4	7	11	14	28	31	100
Non-Monitored	1	1	3	9	11	14	28	33	100

Table A-21

Results of Chi-square Tests Comparing

Distribution of Average Annual Expenses

(Monitored/Non-Monitored)

Groups Compared	χ^2-value	df	Significance Level
All Students	13.04	7	$.050 < p < .100$
Single Students	11.06	7	$.100 < p < .250$
Married Students	9.73	7	$.100 < p < .250$

Table A-22

Comparison of Average Annual Expenses

by Marital Status and Class

Sample Designation and Class	Total	Marital Status			
		Single	Married, no children	Married, one child	Married, two or more children
First Year:					
Monitored	$7,099	$5,782	$8,746	$9,994	$12,162
Non-Monitored	6,551	5,694	9,077	9,214	11,978
National	6,582	5,698	9,054	9,296	12,012
Intermediate:					
Monitored	6,993	5,888	8,050	9,479	10,314
Non-Monitored	7,167	5,810	8,927	9,510	10,740
National	7,158	5,814	8,873	9,509	10,720
Final Year:					
Monitored	7,374	5,552	8,842	9,081	9,849
Non-Monitored	7,628	5,938	9,049	9,074	10,526
National	7,612	5,914	9,036	9,074	10,487

Table A-23

Comparison of Average Annual Expenses of Medical Students

by Marital Status and Sex

Sample Designation	Total	Marital Status			
		Single	Married, no children	Married, one child	Married, two or more children
Men:					
Monitored	$7,208	$5,845	$8,300	$ 9,431	$10,872
Non-Monitored	7,082	5,773	8,856	9,057	10,243
National	7,089	5,777	8,820	9,087	10,286
Women:					
Monitored	6,841	5,623	9,558	-	11,245
Non-Monitored	7,098	5,873	10,025	12,164	15,139
National	7,083	5,859	9,992	12,164	14,706
Total:					
Monitored	7,136	5,786	8,466	9,431	10,938
Non-Monitored	7,082	5,793	8,997	9,286	10,787
National	7,085	5,792	8,962	9,297	10,798

Table A-24

Comparison of Average Annual Expenses

by Marital Status and Self-Description

Self-Description and Sample Designation	Total	Marital Status			
		Single	Married, no children	Married, one child	Married, two or more children
Black/Afro-Am.					
Monitored	$8,412	$6,135	$9,983	$ 9,808	$11,145
Non-Monitored	7,296	6,280	9,533	9,688	11,141
National	7,357	6,275	9,581	9,703	11,142
White/Caucasian:					
Monitored	7,039	5,741	8,390	9,042	11,043
Non-Monitored	7,105	5,794	8,962	9,197	10,791
National	7,101	5,791	8,926	9,186	10,809
Other:					
Monitored	8,129	6,639	8,955	13,717	9,055
Non-Monitored	6,662	5,458	9,484	9,807	10,170
National	6,728	5,500	9,445	10,019	10,077

Table A-25

Comparison of Average Annual Expenses

by Geographic Division

Geographic Division	Sample Designation		
	Monitored	Non-Monitored	National
New England	$9,088	$8,339	$8,368
Middle Atlantic	7,676	7,595	7,598
South Atlantic	6,945	7,046	7,040
East South Central	6,576	6,576	6,576
West South Central	7,065	6,618	6,645
East North Central	7,447	7,274	7,283
West North Central	7,261	6,424	6,487
Mountain	6,421	6,861	6,820
Pacific	6,463	6,747	6,728

Table A-26

Comparison of Average Itemized Expenses

by School Control

School Control and Expense Item	Sample Designation		
	Monitored	Non-Monitored	National
All Schools:			
School Expenses	$2,338	$2,420	$2,416
Lodging	1,684	1,655	1,657
Board	1,138	1,114	1,115
All Other	2,152	2,058	2,064
Public Schools:			
School Expenses	1,570	1,624	1,621
Lodging	1,715	1,657	1,661
Board	1,150	1,096	1,099
All Other	2,295	2,081	2,094
Private Schools:			
School Expenses	3,482	3,582	3,576
Lodging	1,639	1,651	1,651
Board	1,121	1,139	1,138
All Other	1,938	2,025	2,020

Table A-27

Comparison of Percentage Distribution

of Funds by Source of Income

Source of Income	Sample Designation		
	Monitored	Non-Monitored	National
Total Income	100%	100%	100%
Total Non-Refundable	84	84	84
Own earnings and savings	22	23	23
Spouse's earnings	24	24	24
Gifts/Loans from family	21	21	21
F.H.P. Scholarship	1	1	1
NIH-supported grants, etc.	1	1	1
Armed Forces Pay/Scholarship	6	6	6
Veterans benefits	1	1	1
P.H.S. Scholarship	2	2	2
P.S.A. Scholarship	*	1	1
N.M.F.	*	*	*
R.W.J. Scholarship	*	*	*
Grants from school funds	3	2	2
State Scholarship	1	1	1
Other non-refundable	2	1	1
Total Refundable	16%	16%	16%
F.H.P. Loan	5	4	4
Nat'l Dir./Nat'l Def.Ed.Loan	*	*	*
Guaranteed loan (through school or private bank)	6	7	7
School loan	1	1	1
State loan	1	1	1
Private bank loan (not guaranteed)	1	1	1
R.W.J. Loan	*	*	*
AMA-ERF Loan	1	1	1
Personal loan	*	*	*
Other loans	1	1	1

* = Less than 0.5 percent

Table A-28

Percent of Students Reporting Source and Average

Amount Reported: All Schools

Source of Income	Sample Designation							
	Monitored		Non-Monitored		National		JAMA	
	Pct	Avg	Pct	Avg	Pct	Avg	Pct	Avg
Total Income	100%	$8,961	100%	$8,985	100%	$8,984	--	--
Total Non-Refundable	100	7,571	99	7,597	99	7,596	--	--
Own earnings and savings	71	2,843	75	2,763	74	2,767	--	--
Spouse's earnings	36	5,930	31	6,786	32	6,731	--	--
Gifts/loans from family	63	2,965	64	2,932	64	2,934	--	--
F.H.P. Scholarship	7	822	9	1,082	8	1,070	9	$ 831
NIH-supported grants, etc.	4	1,968	2	2,196	2	2,175	--	--
Armed Forces Pay/Scholarship	8	6,626	8	6,893	8	6,878	--	--
Veterans Benefits	4	2,532	3	2,683	3	2,672	--	--
P.H.S. Scholarship	2	7,036	2	7,645	2	7,611	2	7,687
P.S.A. Scholarship	1	4,263	1	4,275	1	4,275	1	4,868
N.M.F.	6	1,084	2	1,395	2	1,367	3	913
R.W.J. Scholarship	2	897	2	767	2	775	3	908
Grants from school funds	20	1,387	16	1,259	16	1,268	19	1,412
State scholarship	6	1,726	7	1,021	7	1,053	--	--
Other Non-Refundable	11	1,268	7	1,569	7	1,543	--	--
Total Refundable	52	2,747	50	2,886	50	2,878	--	--
F.H.P. Loan	29	1,423	26	1,522	26	1,515	28	1,494
Nat'l Dir./Nat'l Def.Ed.Loan	2	1,535	3	1,805	3	1,790	--	--
Guaranteed bank loan (through school or private bank)	29	1,978	30	2,061	30	2,056	29	2,049
School loan	8	1,228	5	1,108	5	1,118	11	1,037
State loan	2	1,888	3	1,898	3	1,897	--	--
Private bank loan (not guaranteed)	3	1,775	4	2,113	4	2,095	--	--
R.W.J. Loan	2	1,104	1	836	2	856	2	864
AMA-ERF Loan	5	1,316	5	1,406	5	1,401	5	1,492
Personal loan	3	1,623	3	1,365	3	1,379	--	--
Other loans	3	2,219	4	1,839	4	1,856	--	--

Table A-29

Percent of Students Reporting Source and Average Amount

Reported by Marital Status: Single Students

Source of Income	Sample Designation					
	Monitored		Non-Monitored		National	
	Pct	Avg	Pct	Avg	Pct	Avg
Total Income	100%	$6,891	100%	$6,732	100%	$6,740
Total Non-Refundable	99	5,527	99	5,279	99	5,292
Own earnings and savings	72	2,758	75	2,486	75	2,499
Spouse's earnings	1	3,275	1	3,603	1	3,583
Gifts/loans from family	75	2,942	72	2,944	73	2,944
F.H.P. Scholarship	6	867	9	1,004	8	999
NIH-supported grants, etc.	3	1,611	2	1,802	2	1,788
Armed Forces Pay/Scholarship	4	7,319	6	6,404	6	6,441
Veterans benefits	3	1,693	2	2,125	2	2,097
P.H.S. Scholarship	2	6,465	2	7,680	2	7,606
P.S.A. Scholarship	1	4,850	1	4,406	1	4,433
N.M.F.	6	1,126	2	1,375	2	1,358
R.W.J. Scholarship	3	759	2	713	2	717
Grants from school funds	22	1,406	18	1,301	18	1,308
State scholarship	6	1,464	8	1,028	8	1,045
Other Non-Refundable	12	1,098	7	1,614	8	1,574
Total Refundable	52	2,706	52	2,892	52	2,882
F.H.P. Loan	30	1,389	28	1,494	28	1,488
Nat'l Dir./Nat'l Def.Ed. Loan	2	1,370	3	1,880	3	1,859
Guaranteed loan (through school or private bank)	30	1,951	32	2,065	32	2,060
School loan	9	1,334	6	1,123	6	1,139
State loan	2	1,243	3	1,834	3	1,816
Private bank loan (not guaranteed)	5	1,727	3	2,021	3	2,000
R.W.J. Loan	1	733	2	800	2	798
AMA-ERF Loan	5	1,309	5	1,390	5	1,387
Personal Loan	2	2,250	3	1,330	3	1,363
Other loans	2	1,640	4	1,599	4	1,601

Table A-30

Percent of Students Reporting Source and Average Amount

Reported by Marital Status: Married Students

Source of Income	Sample Designation					
	Monitored		Non-Monitored		National	
	Pct	Avg	Pct	Avg	Pct	Avg
Total Income	100%	$11,571	100%	$12,691	100%	$12,616
Total Non-Refundable	100	10,125	99	11,391	100	11,306
Own earnings and savings	69	2,956	74	3,225	74	3,208
Spouse's earnings	79	5,967	82	6,829	82	6,773
Gifts/loans from family	47	3,012	49	2,916	49	2,922
F.H.P. Scholarship	8	776	8	1,215	8	1,188
NIH-supported grants, etc.	5	2,244	3	2,712	3	2,658
Armed Forces Pay/Scholarship	13	6,338	13	7,236	13	7,176
Veterans benefits	7	2,952	5	3,018	6	3,013
P.H.S. Scholarship	2	7,750	3	7,609	3	7,616
P.S.A. Scholarship	1	2,500	2	4,141	2	4,106
N.M.F.	5	1,025	1	1,469	1	1,395
R.W.J. Scholarship	1	2,000	1	934	1	965
Grants from school funds	18	1,357	13	1,161	13	1,179
State scholarship	5	2,133	6	1,004	6	1,071
Other Non-Refundable	11	1,496	7	1,473	7	1,476
Total Refundable	52	2,800	47	2,874	47	2,868
F.H.P. Loan	28	1,470	23	1,582	23	1,573
Nat'l Dir./Nat'l Def. Ed.Loan	3	1,700	2	1,653	2	1,657
Guaranteed loan (through school or private bank)	27	2,016	27	2,059	27	2,056
School loan	7	1,066	4	1,077	5	1,076
State loan	3	2,318	2	2,023	3	2,049
Private bank loan (not guaranteed)	2	1,950	4	2,145	4	2,140
R.W.J. Loan	3	1,326	1	934	1	995
AMA-ERF Loan	4	1,325	4	1,441	4	1,433
Personnel Loan	3	1,100	2	1,445	2	1,413
Other loans	5	2,541	5	2,156	5	2,182

Table A-31

Percent of Students Reporting Source and Average Amount

Reported by School Control: Public Schools

Source of Income	Sample Designation					
	Monitored		Non-Monitored		National	
	Pct	Avg	Pct	Avg	Pct	Avg
Total Income	100%	$8,985	100%	$8,323	100%	$8,361
Total Non-Refundable	99	7,927	99	7,150	99	7,195
Own earnings and savings	72	3,092	75	2,642	75	2,668
Spouse's earnings	42	6,218	34	6,630	34	6,601
Gifts/loans from family	58	2,550	61	2,399	60	2,407
F.H.P. Scholarship	7	982	10	1,031	9	1,029
NIH-supported grants, etc.	3	2,064	2	1,236	2	1,317
Armed Forces Pay/Scholarship	11	6,899	10	6,737	10	6,748
Veterans benefits	6	2,690	4	2,616	4	2,622
P.H.S. Scholarship	1	3,717	2	6,904	2	6,789
P.S.A. Scholarship	1	4,017	2	4,160	2	4,154
N.M.F.	2	1,045	1	1,144	1	1,136
R.W.J. Scholarship	2	562	2	704	2	695
Grants from school funds	16	942	14	950	14	950
State Scholarship	4	1,660	6	1,111	6	1,134
Other Non-Refundable	12	1,076	8	1,458	8	1,425
Total Refundable	47	2,377	48	2,599	48	2,586
F.H.P. Loan	25	1,408	26	1,454	26	1,452
Nat'l Dir./Nat'l Def.Ed.Loan	3	1,481	2	1,583	2	1,575
Guaranteed loan (through school or private bank)	24	1,587	27	1,818	26	1,805
School loan	8	884	5	960	5	953
State loan	3	1,983	3	1,879	3	1,885
Private bank loan (not guaranteed)	2	2,000	4	2,019	4	2,019
R.W.J. loan	2	972	2	814	2	828
AMA-ERF Loan	4	1,178	3	1,379	3	1,367
Personal loan	2	983	3	1,156	3	1,147
Other loans	3	2,634	4	1,890	4	1,924

Table A-32

Percent of Students Reporting Source and Average Amount

Reported by School Control: Private Schools

Source of Income	Sample Designation					
	Monitored		Non-Monitored		National	
	Pct	Avg	Pct	Avg	Pct	Avg
Total Income	100%	$8,924	100%	$9,962	100%	$9,903
Total Non-Refundable	100	7,039	100	8,253	100	8,184
Own earnings and savings	69	2,449	75	2,940	75	2,914
Spouse's earnings	26	5,227	28	7,066	28	6,969
Gifts/loans from family	70	3,484	69	3,625	69	3,617
F.H.P. Scholarship	7	574	7	1,185	7	1,152
NIH-supported grants, etc.	5	1,892	3	2,879	3	2,790
Armed Forces Pay/Scholarship	4	5,356	7	7,217	7	7,159
Veterans benefits	2	1,742	2	2,842	2	2,795
P.H.S. Scholarship	4	8,696	3	8,445	3	8,464
P.S.A. Scholarship	1	5,000	1	4,562	1	4,578
N.M.F.	4	1,112	2	1,625	2	1,573
R.W.J. Scholarship	2	1,567	1	919	1	966
Grants from school funds	27	1,782	19	1,609	19	1,623
State scholarship	7	1,761	9	927	9	967
Other Non-Refundable	11	1,577	7	1,755	7	1,739
Total Refundable	59	3,194	53	3,264	54	3,259
F.H.P. Loan	36	1,440	25	1,624	26	1,610
Nat'l Dir./Nat'l Def.Ed. Loan	1	1,750	3	2,044	3	2,037
Guaranteed Loan (through school or private bank)	36	2,369	35	2,335	35	2,337
School Loan	8	1,696	6	1,294	6	1,327
State loan	2	1,667	3	1,924	3	1,915
Private bank loan (not guaranteed)	5	1,606	4	2,239	4	2,195
R.W.J. Loan	1	1,500	1	874	1	906
AMA-ERF Loan	6	1,440	7	1,424	7	1,425
Personal loan	3	2,390	3	1,661	3	1,703
Other loans	4	1,667	4	1,767	4	1,762

Table A-33

Results of Binomial Tests on Percent of

Students Reporting Each Source

Source of Income	Comparison Between Monitored and Non-Monitored		Comparison Between National Sample and JAMA	
	z-value	Significance Level	z-value	Significance Level
Own earnings and savings	-1.70	.089*	-	-
Spouse's earnings	1.70	.089*	-	-
Gifts/loans from family	-0.43	.667	-	-
F.H.P. Scholarship	-1.42	.156	-2.86	.004**
NIH-supported grants, etc.	1.66	.097*	-	-
Armed Forces Pay/Scholarship	-0.16	.873	-	-
Veterans benefits	1.03	.303	-	-
P.H.S. Scholarship	-0.12	.904	1.09	.276
P.S.A. Scholarship	-0.74	.459	3.61	.0004**
N.M.F.	1.37	.171	-7.49	≈ 0**
R.W.J. Scholarship	0.36	.719	-4.56	≈ 0**
Grants from school funds	2.18	.029**	-6.44	≈ 0**
State scholarships	-1.50	.134	-	-
Other Non-refundable	2.56	.010**	-	-
F.H.P. loan	1.57	.116	-3.09	.002**
Nat'l Dir./Nat'l Def.Ed.	-0.29	.772	-	-
Guaranteed loan	-0.48	.631	1.57	.116
School loan	2.05	.040**	-19.53	≈ 0**
State loan	-0.49	.624	-	-
Private bank loan	-0.37	.711	-	-
R.W.J. Loan	0.64	.522	-4.47	≈ 0**
AMA-ERF Loan	-0.33	.741	-0.37	.711
Personal loan	-0.31	.757	-	-
Other loans	-0.97	.332	-	-

*Significant at the 10% level.
**Significant at the 5% level.

Table A-34

Comparison of Distribution by Average Hours Worked

Average Hours Worked per Week	Sample Designation		
	Monitored	Non-Monitored	National
Total Students	100%	100%	100%
Total Who Worked	19	20	20
1-9 hours	8	10	10
10-19 hours	8	7	7
20-29 hours	2	2	2
30-39 hours	1	*	1
40 hours or more	0	1	*
Total Who Did Not Work	81	80	80
Median Hours Worked	10	10	10

Table A-35

Results of Chi-square Tests on Employment

Comparing Monitored and Non-Monitored Samples

Comparison	χ^2-value	df	Significance Level
Percent Working	0.099	1	$.750 < p < .900$
Distribution of hours per week worked	1.594	3	$.500 < p < .750$

Table A-36

Comparison of Percent of Students Who Worked

by Marital Status and Class

Marital Status and Sample Designation	All Students	Class Level		
		First Year	Intermediate	Final Year
Single Students:				
Monitored	19%	11%	19%	30%
Non-Monitored	19	14	21	26
National	19	13	21	27
Married Students:				
Monitored	20	16	18	28
Non-Monitored	21	18	21	25
National	21	18	21	25
All Students:				
Monitored	19	13	18	29
Non-Monitored	20	15	21	26
National	20	14	21	26

Table A-37

Comparison of Relationship Between

Income and Expenses

Relationship Between Income and Expenses	Sample Designation		
	Monitored	Non-Monitored	National
Total	100%	100%	100%
In Balance	10	12	12
with loans	5	7	7
without loans	5	5	5
Income exceeds expenses	62	61	61
Expenses exceed income	28	27	27

Table A-38

Results of Chi-square Tests Comparing the

Relationship Between Income and Expenses

Groups Compared	χ^2-value	df	Significance Level
Monitored/ Non-Monitored	1.668	3	$.500 < p < .750$

Studies in Medical Education

Anderson, P. Descriptive Study of Salaried Medical School Faculty. December, 1975.

Johnson, D.G. and Dube, W.F. Descriptive Study of Medical School Applicants, 1974-75. December, 1975.

Lambdin, J.A. Survey of How Medical Students Finance Their Education, 1974-75. December, 1975.

Nunn, R. and Lain, L. Classification of Medical Education Institutions. December, 1975.

Rosenthal, J. Medical School Programs, Resources and Financing.

Sedlacek, W.E. Variables Related to Increases in Medical School Class Size. December, 1975.

Sherman, C. Study of Medical Education: Interrelationships Between Component Variables. December, 1975.

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